



POPCORN STORY CAMP

Introduction to Web Native Filmmaking
Create Compelling Interactive Stories

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How to Run this Project

1 Introduction

Our future is only as promising as the young people that will bring it to life. Teenagers are inquisitive, rebellious and open-minded so it is no surprise that they are often culture's most effective innovators and catalysts of change.

Jean-Michel Basquiat was 16 when his expressionist graffiti caught the attention of the New York City art world and turned their gallery world on its head... The three young African-American men who refused to leave the "Whites Only" counter of a Greensboro Woolworth's in 1962 were college freshman when they became icons of the Civil Rights movement. Shawn Fanning was just 18 when he created Napster, the computer program that would revolutionize the music industry. Mark Zuckerberg was 20 when he invented Facebook.

This generation of young people is often associated with the rapid saturation of the Internet in our daily lives, and their access to and use of mobile communication devices. Young people have leapt at the opportunity to use these tools to tell their own stories on a global scale. They have become their own production companies and the rest of the world is scrambling to wrap its head around what this means for the future of communication and information sharing.

Right now the Internet is mostly a storage facility; a place to put stories that had been made for other media formats. It is a photo album (Flickr), a year-book (Facebook), a movie theater (Youtube, Netflix), a television channel (Hulu), a post office (Gmail), a newspaper (Huffington Post).

But what is a story made FOR the Internet? What would a story look like that could ONLY be told on the web? A story that took advantage of the unique qualities of the web - its interactivity, its non-linearity, its immediacy and potential for connectivity?

Right now intrepid computer programmers are working with filmmakers and visual storytellers to explore what a film made specifically for the web would look like. It's not easy - could you imagine a movie if you'd never seen one?

To the right are a few of the first "baby steps" towards a new and revolutionary form of Web-Native filmmaking.

Notice how in each of these examples there is an emphasis placed on engagement and interaction: web-native storytelling is not a passive experience, because the internet is not a passive experience. The content is changed by the involvement of the viewer; each viewing is unique.

This curriculum is an effort to get young people involved in this process, to gain their unique insight and benefit from their rebellious spirit. Our future is only as promising as the young people that will bring it to life. Web-based storytelling is an opportunity for young people to lead the way once again



[Wilderness Downtown music video](http://thewildernessdowntown.com)
<http://thewildernessdowntown.com>



[Rebellious Pixels video](http://www.rebelliouspixels.com/semanticremix/)
<http://www.rebelliouspixels.com/semanticremix/>



[Know Your Exit](http://www.robmorrismusic.com/knowyourexit/)
<http://www.robmorrismusic.com/knowyourexit/>

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- a chance to use new technologies to tell stories that inspire passionate engagement and bring lasting change to our communities.

1.1 Skills expected of the facilitator

This curriculum assumes that the facilitator has a fundamental understanding of basic media production techniques. Often our conversation about using video in a web-native manner assumes the video is already filmed, edited and exported in a compressed web-friendly format. This guide will not walk you through the steps necessary to get to this stage. If you feel you need to brush up on your media production experience before tackling web-native storytelling, research some of these simple and accessible online resources such as the Global Actual Plan manual or [Make Internet TV](http://makeinternettv.org/) (<http://makeinternettv.org/>).

However, you are NOT expected to have any computer programming experience before embarking on this journey. Part of what has made web-native filmmaking such an exciting development in the past few years is the great strides that HTML, the foundational language of the internet, has made in becoming more accessible and easy to use.

1.2 Skills expected of the learner

A learner should have previous audio/video production experience and a baseline understanding of the Internet. The learner should be comfortable learning new software and graphic design skills will help the learner translate his or her ideas for the viewer.

It is also highly recommended that learners have a blog, website, or some sort of online presence (other than Facebook) that can be used to participate and contribute to the collaborative experience.

2 Learning Objectives

The goal of this curriculum is to help learners plan and develop a collaborative web native film project and think critically about the subjects and topics you choose.

Learners will learn how to work together to solve problems in a digital environment. Webmaker skills will be presented and developed and learners will develop a base understanding of terms and processes used in Webmaking. At the end of the project, learners should know a variety of collaborative tools that they can use to express themselves on any topic, academic or other.

The [Tumblr](http://www.tumblr.com) (<http://www.tumblr.com>) framework plays a major role in this curriculum and learners will learn the basics of the blogging system and how to use certain tools within it. Technical competencies surrounding the design process are also covered in this



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curriculum. Tips and tricks on the strategic planning and organization of content will help learners think critically about the choices they make when creating.

The other tool that underpins this curriculum is the [Popcorn Maker](http://mozillapopcorn.com/maker) (<http://mozillapopcorn.com/maker>). Popcorn makes video work like the web. The software helps authors create interactive pages that supplement video and audio with rich web content, allowing their creations to live and grow online.

2.1 Methods

The ability to create a collaborative film project using the Web to support the communication, planning and development platform is only attainable through practice. For this reason, a project based method is the best choice.

At Mozilla, we believe that learning is an active process. This curriculum supports knowledge construction as opposed to knowledge reproduction.

The first step in opening the door to Web Native Film and Webmaking is the perceptual understanding of collaborative web practice. This curriculum will help learners develop an interest in technical and communicative skills as their desire to participate in the landscape of the web grows.

Since this curriculum proposes a great deal of self-organized collaborative work, the learners will need to organize their time effectively. They will have to navigate the flexibility of their own project time line in combination with the class project deadline. Time management, group cohesion and cooperation are other lessons this curriculum aims to transfer.

2.2 Time Requirements

Because coming to a decision or answering a complex question can take longer when digital communication replaces face-to-face communication, and because every school or youth-centered organization has different abilities to commit time and personnel to a project, this course is broken up into six phases that span a total of six weeks. The six phases are meant to run in sequential order and the content is prepared in a way that should leave plenty of time for the successful development of a full fledged project. Furthermore, the timing is such that the priorities and wishes of the learner can be worked in.

3 Technology

Video conferences, Etherpad, Chat and Email are recommended media for connecting learners. Chances are, learners will want to work on their projects outside of the allotted time. In today's web landscape there are hundreds of solutions for communication tools, and everyone has his or her

Etherpad

What it is

Collaborative document writing/editing with chat

Setup

Go to [Etherpad](http://etherpad.mozilla.org) <http://etherpad.mozilla.org>

Tips and Tricks

Go to etherpad.mozilla.org/TYPE-THE-NAME-YOU-WANT and give your Etherpad a memorable name. As with all online tools, the lack of connectivity can affect Etherpads ability to function properly! At the end of a large collaborative writing session, export your pad just so you have a hard copy, you know just in case.

Watch out for

the spinning beachball of death. Sometimes if you copy and paste a body of text into Etherpad, a hidden character will cause the pad to fail. If the etherpad won't load for people you try to share it with, this is likely the cause. It's an annoying bug (and we're working to fix it).

Ideas for Interactive Homework

Since Etherpad allows multiple people to type at once, and records each persons contribution as a color, it's a great tool for both the development of group work as well as assessment of individual contributions. Have learners collaboratively write research, scripts or synopses.

Super Awesome Feature

The time slider. Watch the evolution of a particular Etherpad by scrubbing the time slider!

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favorite. All of these tools have pros and cons. One of the learning goals is the ability to effectively collaborate, so allow groups to choose the tools that help them develop that ability.

This project uses a preview version of Mozilla Popcorn — a free tool for making web-native video. This tool was developed side-by-side with the Bay Area Video Coalition during the production of their projects. BAVC participants gave us feedback on our Alpha version of the software. We took that feedback and developed the Beta version you'll be using during StoryCamp.

You will likely run into bugs, and you can help us squash them. Let us know what problems you run into, what your experience is. With feedback from you and your learners we will be able to make Popcorn even better. The insight and imagination that you bring will pave the way for even more web-native storytellers to use the web in fascinating ways.

4 Supervision

In classical forward facing classes, the learners have a passive role and the instructor has an active role. This dynamic is the absolute opposite in this project. You'll act more as a project manager and allow learners to explore their project theme and the communication tools on their own.

Lastly, have fun with it! Just provide your learners with motivation and support and see what kinds of amazing ideas they have.

5 Hack the Project Outline

This curriculum is meant to serve as a jumping off point for you. We hope that you will ignore pieces that you don't feel apply and expand areas where you feel your learners need more guidance. In short, we hope that you will take it, hack it, run it in your classroom or organization and then let us know how we can improve the base curriculum.



Sample Curriculum

Week One: Introduction

In the first week, the project is introduced to the learners either in person or as a synchronous, virtual video conference. Choose a specific theme or topic that you want your learners to explore and modify the project outline below to fit your topic (Italicized text in the project outline indicates the example theme).

Watch the entire Intro to Web Native Film video to give a brief introduction to the six phases this curriculum details. You'll watch segments again at the beginning of each week to help learners make cognitive connections between the overarching theme of each phase and the work they are doing in assignments.

Then, separate learners into groups. Keep the groups under five people per group to ensure maximal participation. Try to put learners together that have similar interests, but varying competencies in digital media and the subject you're basing the project around. Give your learners some tips on how to work together. Talk to them about respecting each others opinions, division of labor, Netiquette, turn-taking, etc.

Next introduce the project and answer any questions your learners might have about your requirements. Think of innovative ways you can use peer assessment to inspire learners to maintain a good work ethic, and explain these assessment procedures to your learners. A sample peer assessment worksheet has been included in the appendix.

You might want to give some quick crash courses on setup and basic usage of the collaborative tools. It's also recommended that you talk a little about the intensity of this project. Groups will likely need time outside of the classroom to complete the project. However, creating a Web Native Film and a supporting site can be very easy or very dedicated, it's completely up to you.

Project Outline

You and your group will collaborate to create a Web Native Film and a supporting Tumblr site.

The Web Native Film should critically and creatively explore a theme related to *Organic Farming*.

The supporting site should:

- showcase the film and the process through which the film was created
- introduce each member of your group
- introduce the sub-theme of Organic Farming. *Example: „Supporting the New Generation of Organic Farmers“*

Week One Appendix

[Peer Assessment Worksheet](#)

[DIY Make a MadLib](#)

Sample Curriculum

- present, support and justify the project narrative explored in the film
- give detailed information on each members perception of this theme AND regular updates (weekly) on the creation process through blog posts that use examples, videos, demos and remixes.
- highlight underlying concepts that connect these perceptions
- allow easy social sharing and commenting
- use video, text, graphics, photographs, animations and other forms of media that are self made or have a Creative Commons license and properly attributes all sources.

Assignments

1: Individual Blogpost

Tool: Your personal website, Tumblr, Wordpress, Blogger, etc.

Write a blog post on the week one guest speaker and initial thoughts on the project.

2: Make a Procedural Story with the Mad Libs Template

Tool: Popcorn Maker

3: Ice Breaker Activity

Tool: Big Blue Button, Google Hangouts, Voxli, Skype, etc

Just hang out with your group and have a social hour over video chat. Try Google Hangouts or use Skype Conferencing. Or meet up in person for an hour. We'll do an informal report-back on your social hour next week (ie I'll ask you if it was fun :)

Week Two: History of Media

Rewatch Chapter 2 (History of Media) of the Intro to Web Native Film video together with your learners. Lead a guided discussion and critical thought experiment surrounding the history of media and how specific medias altered our cultural landscape, why this happened, why it was/is important. Have learners take notes on the discussion.

Assignments

1: Reading: A Brief History of Visual Storytelling

2: Individual Blogpost

Tool: Your personal website, Tumblr, Wordpress, Blogger, etc.

A note about group dynamics:

After the introduction phase, give your learners some time to get to know each other. Trust is an important issue in group work, so the first set of assignments are designed to circumnavigate typical problems and get group members cooperating despite the difficulties that come with working collaboratively through communication technology.

Week Two Appendix

[History of Media Discussion Guide](#)

[A Brief History of Storytelling](#)

[DIY Hack a Commercial](#)

Sample Curriculum

Write a blog post on the week two guest speaker, the discussion on Media History and the reading.

3: Hack a Commercial using the Popup Template

Tool: Popcorn Maker

4: Make Decisions

Tools: Skype and Etherpad

Discuss in your group:

- the Web Native Film and site your group will create. Decide on one and create the first version of your project narrative. Each group member should compose a few paragraphs about the collaborative process. These paragraphs will later form the first blog post that will be put into Tumblr.
- who the moderator is (the moderator is responsible for motivating the group and keeping the project moving along)
- what expected reaction times are (what's the longest amount of time a group member has to react before the moderator intervenes?)
- when your groups weekly chat/video chat appointment is
- which tools your group will use to communicate
- why different perspectives are valuable
- the voice of your project (serious, humorous, formal, informal, etc)

Document your decisions in an online document. Write up how you came to your decisions and compose a synopsis of the discussion help over varying perspectives. Share this document with the rest of the groups.

Week Three: Remixing

Rewatch Chapter 3 (Remixing) of the Intro to Web Native Film video together with your learners.

Assignments

1: Individual Blogpost

Tool: Your personal website, Tumblr, Wordpress, Blogger, etc.

Write a blog post on the week three guest speaker.

2: Create a Gender Remix

Tool: the [Gender Remixer](http://www.genderremixer.com/html5/) (<http://www.genderremixer.com/html5/>)

Play around with the Gender Remixer for a few minutes. Think about what

Week Three Appendix

[DIY Remix a Story](#)

[Designing for Web](#)

[Planning a Web Native Film](#)

Sample Curriculum

happens to the context of the commercial when the video and audio don't match.

3: Jack the News

Tool: [NewsJack](http://newsjack.in) (<http://newsjack.in>)

Play around with NewsJack for a few minutes. Think about how you detect biased information on the internet and save your hack URL!

4: Remix a Story using the Context Template

Tool: Popcorn Maker

5: Sketch a Basic Schematic and Make Design Decisions

In this project you will create a web native film AND build a fully functioning website. You'll need to figure out the structures of these two pieces and make decisions about content. Read the Designing for Web to help you create a schematic for the website. Create a storyboard and schematic for your Popcornified video.

6: Write your Group Profile

Make profiles for each member of the group as well as a group profile. Be creative! A profile doesn't necessarily have to include text! Maybe you want to use Popcorn to make a profile for yourself?

7: Create a Presentation

You'll be giving a presentation about your concept. This should include:

- the draft project narrative
- the motivation for selection of your theme
- a description of your project's target audience
- the hierarchy of your site (structural tree)
- a plan for using page elements (what kind of logo, headlines, graphics etc)
- a plan for your Web Native Film

Prepare a 10 minute presentation. You can make a slideshow, pdf, video, etc. You can even create an online presentation depending on the skills your group members have.

Week Four: Ways of the Web

Rewatch Chapter 4 (Ways of the Web) of the Intro to Web Native Film video together with your learners. Lead a guided discussion about user engagement and user participation.

Sample Curriculum

Assignments

1: Individual Blogpost

Tool: Your personal website, Tumblr, Wordpress, Blogger, etc.

Write a blog post on the week four guest speaker.

2: Style one of your old projects using Thimble

Tool: Thimble

Copy and paste the HTML and CSS of one of your old webpages into the Thimble. Tinker around with the code and redesign the page.

3: Divide up the Production Tasks

Make a list of all the content that needs to be produced. Decide who is responsible for what.

4: Start Developing your Web Native Film

Get your film into the template and start popcornifying it.

5: Prepare Tumblr

Go to tumblr.com and create a new blog. Make sure that each group member has the ability to log in. Discuss and decide on a Tumblr template that you want to use.

6: Begin Development on your Site

Begin putting your content together and place it into your Tumblr. If you need help with Tumblr, check out the Tumblr help site: <http://www.tumblr.com/help>

Week Five: Web Native Storytelling

Rewatch Chapter 5 (Web Native Storytelling) of the Intro to Web Native Film video together with your learners. Lead a guided discussion about user engagement and user participation.

Assignments

1: Individual Blogpost

Tool: Your personal website, Tumblr, Wordpress, Blogger, etc.

Write a blog post on the week five guest speaker.

2: Report the News using the Newscast Template

Tool: Popcorn Maker

Week Five Appendix

[DIY Report the News](#)

Sample Curriculum

3: Continue Development of your Project

Nuances of your project likely changed after seeing the possibilities of Web Native Storytelling and gathering feedback from other groups. Iterate pieces and parts of your project with your group. Make new plans, change designs, push yourselves to make your project better.

Week Six: Web Native Film Planning

It might seem strange that the last chapter of the „Intro to Web Native Film“ video is about planning a web native film. It's true that the planning always comes first, but this curriculum is meant to serve as an introduction. Now that your learners have all the technical and communicative skills to create a large scale collaborative project, they'll think about planning differently. Rewatch the last chapter with your learners and lead a discussion about how their ideas have changed based on the last few weeks.

Assignments

1: Individual Blogpost

Tool: Your personal website, Tumblr, Wordpress, Blogger, etc.

Write a blog post on the week six guest speaker and the project as a whole.

2: Release your Project into the Wild

Tools: Social Networking and Sharing Sites (eg Twitter, Facebook, etc)

Spread your project far and wide! Make sure and send a tweet to [@popcornjs](#) and [@mozilla](#) to share your project with the greater Popcorn and Mozilla communities. Join in on a Mozilla Webmaker Call to talk about your project.

Peer Assessment Worksheet

Here are some broad topics and sample questions you can use to think about the work of your peers:

Evidence of Data Gathering

- Did my peer show that he/she had gathered assets to support his/her opinions and his/her web native story?
- Did my peer properly attribute resources?

Evidence of Understanding

- Did my peer show that he/she understood the information gleaned from the video/reading/group activity/etc?
- Have they used their own words to restate or paraphrase the material?
- Can they explain the key issues in their own words?

Evidence of Reflection and Analysis

- Does my peers work show effective iteration?
- Does my peers work show that they have drawn a conclusion about the topic?

Evidence of Creativity

- Did my peer create anything that shows a new take on the topic and his/her own grasp of the topic?

DIY Make a Mad Lib

Add vintage titles, robots speaking, comic style speech bubbles and your own special brand of silly to make a mad lib for your viewers to fill out.

Step 1: Open <http://mozillapopcorn.org:8888> in your browser

Step 2: Click “Get Started” and choose the Mad Lib template

Step 3: Start by using the Robots Invade Everywhere video that is preloaded into the template or click the Edit Source button in the upper lefthand corner of the video and change the URL to the URL of the video you want to work with.

Step 4: Drag the “Filmgrain” event from the right panel into the beginning of the timeline. You can click and drag the right side of the event to make an event longer.

Step 5: Drag the Title-Top event onto a new track in the timeline. If you need a new track, click the Track + button on the lower left-hand side of the interface. Double Click the Title-Top event and change the title. Make sure the “Target” is “Video Overlay”. Click done. You can also add and edit the Title-Mid event and change the wording there. Don't forget to add a Title-Bottom for your name!

Step 6: After you've clicked done on each of the title events, place a Zoink event somewhere on the timeline. Double Click the “Zoink” event and change the text. You can also change the bubble style (speech or thought bubble). Try out different classes and use the “Top” and “Left” properties to position your bubble. Play around with the options so that your Zoink bubble is positioned the way you like.

Step 7: Drag a Speak event to the Timeline. Double click to change what the robot voice says and play around with those options.

Step 8: Add a map to second :19 extend the event to cover up the spot in the film where it says “the users map”. Double Click to set it's location and click done.

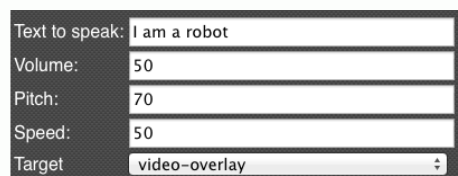
Step 9: Drag an image event to the Timeline around :22. You can use any image from the web to cover the note “users facebook picture”, but pay attention to the voice over in the video. The robots are targeting a



Robots Invade Everywhere video



ZOINK! Speech bubble



Speak event options



Google Map at :19

DIY Make a Mad Lib

specific person.

Step 10: Continue adding and editing events until your video is what you want it to be. When you're ready, click the "share" button and copy and paste your link to save it somewhere. Then, click the export button and save your code.

Step 11: Share with the world. Share your video link widely. Tweet your video link with the tag #AllHailRobots

Step 12: While waiting for the invasion, iterate your project based on the feedback you receive.



Tweet using hashtag #AllHailRobots

History of Media Discussion Guide

Lead a guided discussion and critical thought experiment surrounding the history of media and how specific medias altered our cultural landscape, why this happened, why it was/is important. Have learners take notes on the discussion.

Some stuff you can talk about with your learners:

The Printing Press – Before Gutenberg invented the printing press, communicating with the masses was something that only the Church or the very wealthy could do. Information was localized and it stayed localized, it wasn't copied or distributed often and there was a massive divide between the haves and have nots. Then, Martin Luther used the technology to start the Protestant Reformation....

Thomas Edison invented the **Phonograph**, instigating Mass Medium #2: Recordings. Edison's invention allowed people to share information first hand, over time and across great distances. Recorded music influenced society in a great many ways. Jazz, for example, opened the doors for newly freed slaves to become entertainers and in the 60's Rock and Roll continued the "freeing" of people of color as well as women from traditional life styles.

Cinema expanded on recordings allowing us to both SEE and hear other people's experiences. For more detailed discussion points on cinema, see [A Brief History of Storytelling](#)

Radio – When Marconi figured out how to transmit live messages using Morse code, he changed the way mankind related to information. It was the first time we could experience what was going on "over there" instantaneously. The reason that the Titanic sinking had such an impact is partly because live transmits were being sent from the scene. People were able to experience the drama as it happened and it's been said that the only reason there were ANY survivors from the Titanic was because of Marconi's invention.

Then came **Television**, initially an extension of radio broadcasts, early TV was probably kind of boring. But now, we all know that TV has the power to inform us instantaneously. And to show us that in "reality" everyone has perfect hair and teeth.

After TV nothing happened for a while until the US Military started experimenting with distributed computer networks. That didn't actually help out the general public much until 1989 when Tim Berner's Lee developed the



Gutenberg Printing Press



Edison's Phonograph
Image Attribution: Doug Coldwell
http://commons.wikimedia.org/wiki/File:WPV_Edison_Phonograph.jpg



Marconi's Radio
Image Attribution: F1jmm
http://commons.wikimedia.org/wiki/File:Radio_MARCONI.jpg

History of Media Discussion Guide

World Wide Web. Now the WWW can do everything the first 5 media forms could do:

- Read and publish content
- play recordings
- watch movies
- listen to radio
- watch TV

There is a lot of crap on the Internet, true, but there is also a lot of truly fascinating and thought provoking information that is changing society every day. Just look at the Arab Spring, for example, and the fact that Twitter had an integral part in instigating real-world change in Egypt.

A Brief History of Storytelling

Introduction

To understand the tremendous opportunities that the internet offers as a new storytelling medium, we need to first begin to think about it as a new “canvas” with its own unique properties, and we need to understand how it is different than the artistic forms of expression that have preceded it.

This handout provides a brief historical review of the evolution visual storytelling. It focuses specifically on how artists took advantage of each new technological development in visual expression, but also how each development – from painting to photography to motion pictures to video games – also dictated the kind of content that is produced. Thinking about each art form this way will be crucial when we envision the internet as a storytelling canvas and discuss the best-practices for web-native filmmaking.

Anyone who has ever tried to write a script knows that you cannot write interior thoughts in a screenplay, you can only what we can see and hear. In a novel, you can write “Tom is hungry” – you can tell us that someone is hungry, but in a movie you must show us that Tom is hungry: “Tom’s stomach rumbles.” The novel may have the advantage over the film in sharing interior thoughts, but can written words express the grandeur of Avatar’s visuals? Or express the depths of Heath Ledger’s unsettling performance as The Joker in The Dark Knight?

Or: Imagine you were given a pad of paper and a pencil and asked to tell a story with it. Now imagine you were given the same pad but with a set of watercolor paints instead – don’t you think the kind of story you told, and how you told it, would be different? Now imagine your pad of paper is the internet...

Cave Paintings

Thirty four thousand years ago, in a large cave in Southern France, an artist used pigment to create some of the first known paintings. Herds of bison, charging rhinos, leaping gazelle. The animals – some of them now extinct - were rendered in startling detail. However, these were not simply portraits. The animals were interacting with one another – and interaction is story. The artist was a storyteller. By using visual means of expression to recount the artist’s experiences at that moment in time, we can draw a line between the caves of southern France and the contemporary stories we see unfolding on our computer monitors in the present day.

There is evidence that those early painters struggled with the limitations of their chosen “canvas” and also found ways to take advantage of the opportunities their unique art form provided them. Painters in the Chauvet caves sanded down the textured walls to have a lighter, smoother surface upon which to work, and then after the paintings were completed they etched an outline of the subject into the stone so that the torchlight would cast shadows that made the image stand out. In other places, rather than try to dis-



Lascaux Cave Painting
Image Attribution: *The Adventurous Eye*
<http://www.flickr.com/photos/theadventurouseye/5602930382/>

A Brief History of Storytelling

guise the texture or curvature of the walls, the artists actually incorporated these qualities into their work. A jagged piece of the wall could be used to represent fur, the sloping lines of a rock face could direct the viewer's eye to where the artist wanted them to look.

So what can we say made the cave wall unique as a medium for visual expression? What are its benefits as a canvas? What are its limitations? First off, the work of art is singular – you cannot copy a cave wall. Obviously, this also means you must go to the cave – it isn't coming to you. While this may seem like a limitation, think about the experience of standing before something that you know is unique in the world – a building, a sculpture, even a person. Something that can be copied is more accessible, but for that very reason it also loses some of its magic. Cave walls are rarely smooth, so you must accommodate the textures and shape of the wall, but they are also not confined to a specific shape the way a piece of paper or a canvas is. It can take any shape, and it is three-dimensional – there is freedom, and possibility, that doesn't exist in the confines of an 8.5x11 sheet of paper.

We could spend time discussing the evolution of painting, the advantages and disadvantages of watercolor vs. oil-based paint, but you get the point – each medium is unique, each has its strengths and limitations, and our images and stories are shaped by the medium we choose to express ourselves in. Moving on!

Photography

The first photographs were taken by a Frenchman named Joseph Nicéphore Niepce in 1827. They were called Heliographs because the images were etched by rays of light from the sun. Later, photography would capture an image on a celluloid material – called a negative – that allowed for the precise duplication of images.

Photography was unique in many ways: it produced art that precisely replicated the subject, unlike the subjective interpretations of painting or drawing. It also was produced quickly – the image was captured in a fraction of a second, and the chemical developing and printing could be done in hours. Its speed and potential for reproduction made photography the most important development in visual expression in centuries.

If the benefits of photography were its striking ability to produce what we would consider “life-like” imagery at a remarkable speed, what were its limitations? As with painting on canvas (and perhaps because of the canvas), a rectangular frame was quickly agreed upon by purveyors of the art. Once mass-produced cameras embraced the aspect ratio the rectangle became the format that all photos had to adhere to. Images were also limited to black and white expression for the first 75 years of photographic history; readily accessible color photography was introduced to the public in 1903.

Perhaps most importantly, though, the photographic artist also surren-



Joseph Nicéphore Niepce Heliograph

A Brief History of Storytelling

dered control over the subject – a painter could create each aspect of the image as she desired, while a photographer is “stuck” with using what actually exists in the world. The photograph sacrificed poetry for authenticity.

Motion Pictures & Television

The first motion picture device is credited to Eadweard Muybridge, who used a series of cameras to study the motion of horses in 1877.

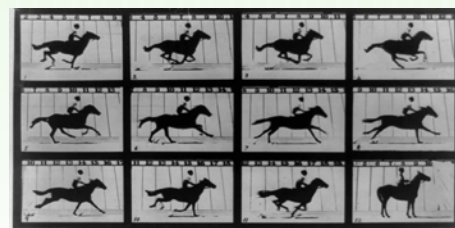
Movie cameras built upon the still-image camera’s capacity for capturing what is perceived as reality. The combination of photographic fidelity with seamlessly moving images, along with the invention of the magnetic audio track and the development of a system of editing by early American filmmaking pioneers like Thomas Edison and D.W. Griffith, resulted in an art form that viewers could engage on a level of near-hypnosis.

At first, however, storytelling wasn’t considered the domain of the motion picture camera, Early films were basically long-format still photographs – footage of a baby eating, a train arriving at a station, people leaving work after a long day at the factory. In the same way that we see the internet as simply an improved version of other media (better than mail, better than a yellow pages, better than a Thomas Brothers, etc), we first envisioned the motion picture camera as just a better version of the still camera, rather than its own unique means of artistic expression.

What we would consider the “grammar” of film language – close up shots, reverse shots, continuity editing, special effects – began to emerge at the turn of the century and by the 1914 had crystallized into something we would recognize in today’s theatres. And this particular voice, this mode of storytelling that disguises editing and creates a highly-seductive illusion of continuous time and space, has become the dominant form of visual storytelling on our planet.

If we identify the unique property of the motion picture storytelling as the ability to create a hypnotic, life-like world that the viewer gets sucked into, then what are it’s limitations? Well, for much of its history, motion pictures were so prohibitively expensive to make that few people got to make them, and those that did were severely limited in what they could do and say by the financial constraints put upon them. In short, movies were expensive to make and had to make their money back, so they had to follow a very precise, very limiting formula.

As filmmaking equipment became more affordable and accessible, there were more opportunities for artists to pursue non-commercial storytelling. By the time these opportunities emerged in the 1950s and 1960s (most notably in the form of smaller 16mm and 8mm film cameras), though, audiences had a long-established expectation of what a film should look and sound like. The magic of film’s ability to mimic real-life was also a prison: audiences did not tolerate deviations from that style of storytelling.



Eadweard Muybridge Running Horses

A Brief History of Storytelling

While we were open minded about impressionist and abstract painting, we struggled with motion picture expressions that didn't hold true to the way we saw and heard the world around us.

A conversation about the developments in motion picture technology and storytelling wouldn't be complete without mention of the television revolution. First design in 1926 and implemented in Germany in 1935, the television came to American in 1941 and by 1959 there were 50 million TV sets in the country.

Television offered a revolutionary means of engagement: changing the channel. This wasn't available when one went to the movies – the closest a filmgoer could come to changing the channel was walking out of one theater and into another. Television also offered live broadcasts, offering a more comprehensive experience than the radio broadcast. Finally, the content was also endlessly streaming: you could always watch television. These qualities are both early echoes of the interaction we see with the internet today.

If film form was limiting in its scope and language, though, television was far more so. Deeply-rooted financial pressures and rigorously adhered-to schedules (24 minutes for a half-hour slot, 44 minutes for an hour slot, etc) made television highly formulaic and limited in storytelling opportunities.

Video Games

The first video game is widely recognized as “Cathode Ray Tube Amusement Device”, an extremely basic one-player proto-Missile Command devised in 1947 for an analog computer. Fifty years later, video games would surpass motion pictures as the high-grossing visual-storytelling medium on the planet.

While television gave you the opportunity to change the channel from one story to another, video games offered the opportunity to actually change and even create the content of the story. Most story-based video games still operate on a largely linear path with a set outcome, the getting-there is going to be unique for each “user” (and note the distinction between “viewers” and “users” – what do we call people who engage with web-native films?) And while video games may have lacked the life-like image quality of films, they made up for it in interactivity and identification: having an avatar – a graphic representation of the user – that responded to her commands.

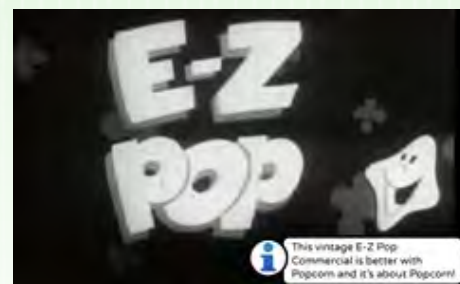
Interactive storytelling is becoming increasingly common in our society. Consoles like the Wii have made gaming more accessible to broader communities. The passivity of the motion picture experience is being challenged by the interactivity of the gaming console. Again, we can see echoes of the internet in the degree to which the user or viewer can dictate the terms of engagement with the story.



SpaceWar! The first video game
Image Attribution: Joi <http://en.wikipedia.org/wiki/File:Spacewar!-PDP-1-20070512.jpg>

DIY Hack a Commercial

Add your own voice to an old commercial by adding popups and commentary. You can change meanings, extend messages, and otherwise recontextualize the video.



Commercial for E-Z Pop circa 1948

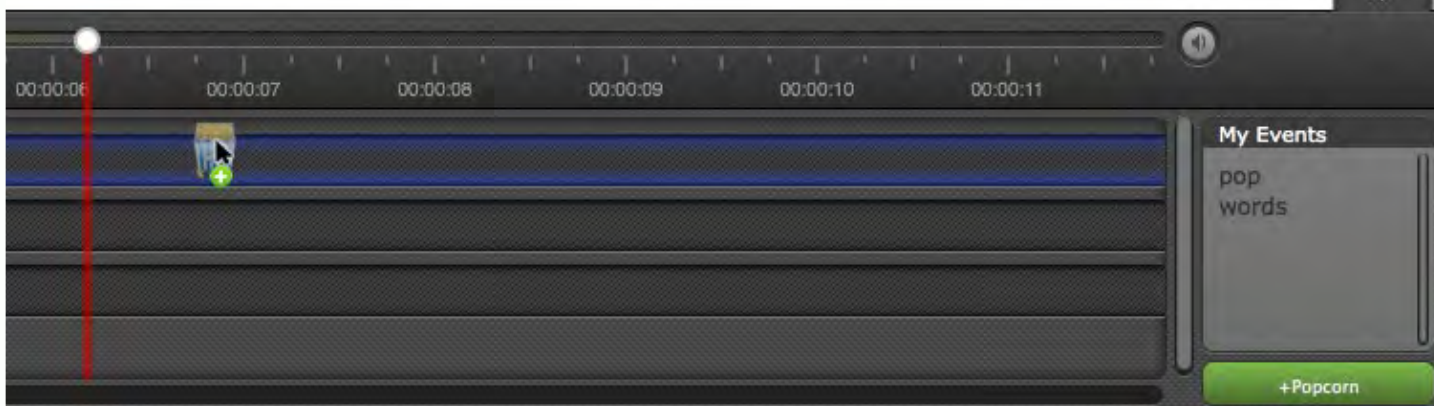
Step 1. Find a commercial you would like to comment on at http://archive.org/details/prelinger_commercials Browse by collection or title. Once you've found a commercial to work with, choose a file type (we recommend the ogg file format) and click to open the commercial in your browser.

Step 2: Open <http://mozillapopcorn.org:8888> in your browser

Step 3: Click "Get Started" and choose the Popup template

Step 4: Click the Edit Source button in the upper lefthand corner of the video and change the URL to the URL of the of the commercial you'll be commenting on.

Step 5: Drag a popup event to the place in the Timeline where you want the popup to appear.



drag the event from the right to the timeline

Step 6: Double Click on the event to adjust the text, position, and sticker for that popup event.

Step 7: Keep adding popup events to the timeline. When you're ready, click the "share" button and copy and paste your link to save it somewhere. Then, click the export button and save your code.

Step 8: Share with the world. Share your video link widely.

Step 9: Iterate your project based on feedback you receive.

DIY Remix a Story

Designing for the Web

Designing for your AUDIENCE:

You need to know who your target audience is. A target audience is a group of people that have something in common, and it greatly influences many design aspects.

Think about the type of people you want to engage. Make notes about things like age, family status, computer experience and interests or hobbies.

Write a general description of your user.

The **target audience** is important because it helps to answer a bunch of design questions you're going to have.

Age range: Could impact color scheme, text size, and language used.

Level of computer experience: Impacts viewer's ability to interact with the site. What are they used to in terms of site design?

Hobbies/Interests/Pastimes: May help to gear and guide the taste of the site as well as point views to other resources within these interests that they enjoy.

Content

Write all the content bits and pieces out on little pieces of paper. Then, categorize the pieces. This exercise will give you a logical global navigation (and subnavigation if you have lots of content).

There's no one way to organize content. You need to have a feel for what your content is, and then categorize pieces together. Don't forget, it's easier to rearrange pieces of paper than electronic data.

This process doesn't just help the organization of content, it also helps you begin to think about production resources you will need and a time plan.

Navigation

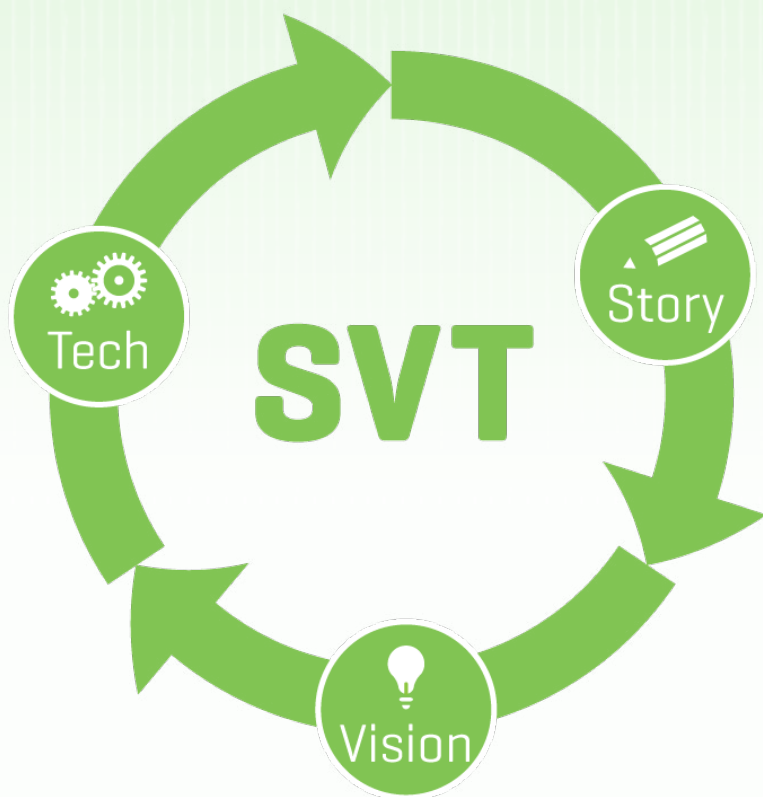
If you've worked through the content section, you'll know that Navigation relies quite heavily on the content. Organizing content will reveal logical global and sub navigation. What comes first? Create a hierarchy for your content.

The site map shows exactly how many navigational items you'll need as well as the hierarchy of the pages. The creation of a site map will also help you eliminate irrelevant content and know what you need to produce. It's a good idea to take your time with this because without it, it will quickly become confusing where a particular piece of content "lives". A simple and clear navigation structure is important so that your users don't get confused or frustrated.

Ask yourself:

- How old are these people?
- Do they have a lot of family obligations?
- Do they have a particular career path?
- How often are they online?
- What are their hobbies?

Planning a Web Native Film: SVT



To help plan a web native film, we recommend a model called “SVT” (or Story, Vision, Tech). This cyclical model begins with the **story**. Technology can serve as inspiration, but **never substitute for a story**. Your number one job is to tell a story. **Never forget it!**

Story

What is your story about? Who are your characters? What are their motivations? Why should your viewers care? In web-native stories and traditional stories alike, story matters!

Vision

After you have the story, think about how you’d want your user to experience that story. How do you envision a viewer interacting with your web native film? What are the unique characteristics of the web (like participation, or interactivity) that can help you tell your story more effectively? You’ll need to bring a creative vision that serves as the expression of your story.

It may help to sketch out storyboards, wireframes, or stage directions for how you want people to experience your story. Try to describe how it should work, not how you’d build it.

You shouldn’t worry too much about technology at this stage—your creative vision will determine the technical requirements. Just think big and

Information Architecture & Procedural Storytelling

Here are two concepts that apply specially to web-native stories: **information architecture** and **procedural storytelling**.

Information architecture refers to the way your app is structured. If you were making a traditional film, you’d need a basic information architecture to keep track of your notes, research, and footage. But the finished film requires no such architecture, since it’s a flat 90 minute film.

A web-native film is in a piece of software so it needs an information architecture. Information architecture is simply a system of organization that takes into account both how you present information and how a user accesses that information.

If, for example, your film brings images into the page: you need to have a mental model of what those images might be, where they are stored, and how they’re retrieved.

Procedural storytelling refers to a way of designing stories so they’re different every time. Procedural storytellers write the rules once and trust a computer to actually execute the story. Modern videogames are procedural stories, in that they respond to player actions. Madlibs are a kind of procedural story, in that a Madlib will be different each time it is completed by a new person.

Planning a Web Native Film: SVT

figure out how to build it in the next step.

Tech

Once you have a story and vision, you'll be able to investigate what kind of technology you need to make your vision come alive. The advantage of developing a vision first is that you'll know exactly what technical challenges you'll need to solve to make your vision work.

Everyone's technology needs will be different. You'll need to do some investigation around possible solutions— perhaps by searching the web, or consulting with a developer, or emailing the creator of a similar project for advice.

If you can at all avoid it, don't waste your time writing code. The beauty of open source is that often, someone has already solved your problem. It's much smarter to spend time repurposing and mashing together code, rather than starting from scratch.

Don't include technical components just because they're shiny and cool: the tech needs to serve the project's goals.

Rinse and Repeat!

After you've cycled through story, then vision, then tech—you'll want to come back to story.

Maybe your idea of the story has changed along the way. Or maybe you think that the technology isn't there to support your vision, and need to revisit whether this is the best story to develop for the web. Be brave and not afraid to iterate on your work—it's part of what makes an excellent storyteller.

Show your work

There are some differences between web-native storytellers and conventional storytellers. Many storytellers are afraid of showing things that are half done. Filmmakers, for instance, do a lot of iteration on their projects, but it usually happens in private—they continue to tighten their edit to test the flow, tempo, and rhythm of a certain cut. But to adapt to the web, filmmakers have to be willing to do this kind of iteration in public.

As a web-native storyteller, you're necessarily making software. And in the software world, we like to say "if you're not embarrassed when you ship your first version, you waited too long." (quote this in a popup)

The best way to tackle a web-native project is to release early, release often and iterate on your ideas constantly. Using a cyclical model might mean your project may never be finished, but you can be sure it will be awesome. Like Da Vinci said, "Art is never finished, it's only abandoned."

In summary

Start with a story—an actual story about actual people and their motivations. Then have a vision for how you can tell that story more effectively using the web. Then, and only then, figure out the specific technologies you will use to implement this vision. This way, you'll be in a position to make technology work for you—and not be stuck asking "what can I do with technology?"

DIY Report the News

Sample Web Native Stories

City Slicker Farms

The Story: Zoe and Jasmine want to tell a story about the West Oakland organization City Slicker Farms, which has spent the last ten years working to promote access to fresh produce and prevent violence by “boosting community” through a series of communal urban gardens and weekly farm stands. The girls are also impressed by CSFs “Backyard Garden” program, in which the organization helps homeowners set up gardens in their backyard and then provides them with seedlings and regular follow-up visits. They want to create a project that brings visibility the organization and shares important information about their efforts, but they also want to make something that reinforces the City Slicker commitment to bringing people together and creating a sense of shared community.

The Project: The team envisions a web-native project utilizing both Google Maps and Youtube in which their documentary plays over the center of a Google Map of West Oakland. As the documentary mentions different farm sites that City Slicker Farms has created, pins would drop where they are located on the map. These pins would be clickable, linking to a short Youtube-link video portrait of the location. Furthermore, there would be an option for beneficiaries of the Backyard Garden program to drop their own pins where their home gardens are located and share videos or still images of their progress.

Huey P. Newton Foundation

The Story: Nick, Brian and Patrick recently took the Black Panther Legacy Tour of West Oakland - a four-hour door-to-door history lesson, conducted by former Black Panther Chief of Staff David Hilliard. The tour stops at crucial locations in the Black Panthers struggle and highlights the role that the political party played in fighting for basic civil rights of the African-American community in the late 1960s and early 1970s. The young men were deeply moved by the tour and were appalled by the lack of recognition the City of Oakland had accorded sites of such historical significance.

The Project: The filmmakers decide to create a virtual walking tour to raise visibility of the Black Panthers importance to the West Oakland community and to provide an opportunity for individuals outside of Oakland to learn the history. They envision a kind of video slide show moving from location to location - each “stop” would include historical stills, Google Street View images of the location as it is now, a wikipedia button that would provide additional context, an audio button that would play narrative voiceover from David Hilliard, and a comment box that would allow viewers to share what they’ve learned, along with a link, via Twitter or Facebook.



City Slicker Farms plants gardens to renew communities

See the project at: <http://popcornjs.org/demo/cultivating-community>



Huey Newton adresses a crowd in Oakland

See the project at: <http://bavc.org/sites/live/files/factory/historyinthestreets/about.html>

Sample Web Native Stories

Creative Growth artist studios

The Story: Julian, Stephanie and Matt are making a documentary about the Creative Growth artists studio in Oakland, California - the first art gallery in the country created specifically for artists with developmental disabilities. They want to create a project that shares with the audience the "safe space" that Creative Growth fosters through positive reinforcement and a spirit of inclusion.

The Project: The team envisions a web-native documentary that is preceded by a short questionnaire that prompts the viewer to share their ideas of what is beautiful and who inspires them. After completing the short survey, the documentary begins: it uses interviews with the Creative Growth staff to share the broad tenets of the organization's philosophy but then has empty place-holders for b-roll that are "filled in" through an automated Google image keyword search using the viewer's answers in the survey. The documentary would then be endlessly variable, tailored to the tastes of the viewer, and in line with the inclusive and open-minded philosophy of Creative Growth.



Creative Growth Art Center

See the project at: <http://bavc.org/sites/live/files/factory/creative-growth/about.html>

Inspire USA

The Story: Ray, Lauren, and Fifer are working with Inspire USA, a non-profit that helps teens cope with depression & mental illness and live happier lives. The Factory group is creating a series of vignettes to share the stories of survivors. They have settled on four stories submitted by youth who have experienced mental health issues.

The Project: For the web-native version of their project, the emphasis remains on "finding your purpose." Viewers will be able to watch the vignettes, as well as discovering and sharing positive messages on Twitter. This project will help teens discover that it is not unusual to go through tough times, and that they are not alone.



A mockup for the Inspire USA project by the Factory

See the project at: <http://bavc.org/sites/live/files/factory/inspireyourself/index.html>