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, and their access to and use of mobile communication devices, is often associated with the rapid saturation of the Web in our daily lives. 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.

The web combines media: It is a photo album (Flickr), a yearbook (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 Web? 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?

In the sidebar 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 - a chance to use new technologies to tell stories that inspire passionate

Wilderness Downtown music video
http://thewildernessdowntown.com

Rebellious Pixels video
http://www.rebelliouspixels.com/semanticremix/

Know Your Exit
http://www.robmorrismusic.com/knowyourexit/

How to Run this Project

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 simple and accessible online resources such as the Make Internet TV (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. StoryCamp is an introduction to web native filmmaking concepts and a set of activities to set the stage. Our expectation is that this will inform your own work this summer and provide a foundation for you to apply these concepts to the work you do with your students.

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.

How to Run this Project

The primary tool that underpins this curriculum is Mozilla Popcorn (http://summer.mozillapopcorn.org/). Mozilla Popcorn is an online video editing tool that lets you combine and remix data from the most popular web services, like twitter, wikipedia, and google maps, directly into the timeline of any video.

The Tumblr (http://www.tumblr.com) blogging tool 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 curriculum. Tips and tricks on the strategic planning and organization of content will help learners think critically about the choices they make when creating.

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 understanding that webmaking is a collaborative 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.

Etherpad

What it is

Collaborative document writing/editing with chat

Setup

Go to Etherpad 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!

How to Run this Project

3 Technology

The most important thing to remember in terms of technology is that everything we create is for the web. Not only do we plan to publish on the web, but many of the tools we use, such as Mozilla Popcorn, exist as web applications rather than installed programs on our computer. Because of this, it is critical that you run this program on up-to-date web browsers. Our curriculum is designed to support the latest versions of either Mozilla Firefox or Google Chrome.

Video conferences,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 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, Story Camp is introduced to the learners either in person or as a synchronous, virtual video conference. We'll be using an open source platform called Big Blue Button. 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 you hope to complete by summer's end, 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.

Week One Assignments

1. Watch the "Episode 1: Introduction video" and explore the pop up links in the video

2: Brainstorm a Project Synopsis

The Web Native Film should critically and creatively explore a story. *An example might be your local organic farm, or the work of an area charity.* Work with your group to create a paragraph description of what you would like to work on over the summer.

Week One Appendix

Big Blue Button Guide

Popcorn Reference

Peer Assessment Worksheet

DIY Make a MadLib

Sample Curriculum

3: Prepare your supporting site

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. We suggest using tumblr for its ease of use (www.tumblr.com), but use whatever blogging platform makes you most comfortable. If you have an existing blog, feel free to use that.

The supporting site should:

- showcase the film and the process through which the film was created

- introduce each member of your group

- introduce the subject of the film, ***Example: „Supporting the New Generation of Organic Farmers"***

- 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.

4: Write a Blog post

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

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

5: Make a Procedural Story with the Robots Template

Tool: Popcorn

The "Robots In Everytown" template is meant to give an introduction to the concept of "procedural storytelling". The template allows you to change the maps, images and voices of the robots within the story. Discuss how these different user-generated options change the meaning and tone of the piece. Consider whether the video you create could be made in any medium other than the web. Why or why not?

6: 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

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.

Sample Curriculum

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 (i.e. we'll ask you if it was fun :)

Week Two: History of Media

Week Two is intended to have students reflect on the relatively short history of the web as compared to other communications media. The activities are meant to spark critical thought surrounding the history of media and how specific medias altered our cultural landscape, why this happened, why it was/is important. Lead a discussion as it relates to your projects, and have learners take notes on the discussion.

Week Two Assignments

1: Watch the "Week 2: Media History" curriculum video and explore the pop up resources in the video

2: Read "A Brief History of Visual Storytelling" in the appendix of this curriculum

3: Write Individual Blog post

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

4: Hack a Commercial using the Popup Template

Tool: Popcorn

See the DIY activity - this activity will have you recontextualize classic commercials from the Internet Archive using Popcorn Maker

5: Project Management

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.

- … what roles individual learners will play. Will some members focus on video production, while others dive into web making?

- … which tools your group will use to communicate

- … why different perspectives are valuable

- … the voice of your project (serious, humorous, formal, informal, etc)

Week Two Appendix

History of Media Discussion Guide

A Brief History of Storytelling

DIY Hack a Commercial

Sample Curriculum

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: Remix

The Remix chapter is intended to have learners consider how the creative process depends on influence - and how the structures of the web depend on the ability to build on the work of others.

Week Three Assignments

1: Watch the "Chapter 3: Remix" curriculum video and explore the pop up resources in the video

2: Individual Blog post

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

Write a blog post on the week three guest speaker.

3: Create a Gender Remix

Tool: the Gender Remixer (http://www.genderremixer.com/html5/)

Play around with the Gender Remixer for a few minutes. Think about what happens to the context of the commercial when the video and audio don't match.

4: Jack the News

Tool: NewsJack (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!

5: Remix a Youtube Video using the Pop Up Template

Tool: Popcorn

Week Four: Ways of the Web

This week focuses on the open working methodologies of the web - the goal of this week will be to introduce learners to the basics of making web sites using HTML, CSS and JavaScript.

Week Four Assignments

1. Watch the "Week 4: Ways Of The Web" curriculum video and explore the pop up resources in the video

Week Three Appendix

Designing for Web

Planning a Web Native Film

Sample Curriculum

2: Individual Blog post

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

Write a blog post on the week four guest speaker.

3. Explore the Web Making projects at Webmaker.org

Visit Webmaker.org - as part of the Summer Code Party, Mozilla and other partners have created a series of projects that teach the basics of writing HTML and CSS. Explore these projects and play around with the ones you find most appropriate. Use Mozilla's Thimble to play around with HTML. Mozilla's Thimble App makes it ridiculously simple to create and share your own web pages.

4: Edit the style one of your old projects using a text editor

Tool: Any Text Editor

Using the "view source" option of Popcorn, Copy and paste the HTML and CSS of one of one of your previous popcorn projects into a text editor. Using the skills you learned at Webmaker.org, tinker around with the code and redesign the page.

Week Five: Web Native Storytelling

Week 5 is a detailed examination of the web as a unique storytelling medium. The curriculum video is full of examples and resources that will provide students with inspiration as they get closer to beginning production on their own work. They'll also produce their own personal News Cast, inspired from the weeks guest speaker.

Week Five Assignments

1: Watch the "Week 5: Web Native Storytelling" curriculum

video and explore the pop up resources in the video

* Note this week's video has many examples

2: Individual Blog post

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

Write a blog post on the week five guest speaker.

3: Report the News using the Newscast Template

Tool: Popcorn

This popcorn template is an example of how a news report could be delivered differently when it is connected to the web - the template allows you to pull in live data and stories.

About Text Editors

What they are

Anyone can edit HTML, CSS and Javascript using a simple text editor. Popcorn allows you to export your code, so having a basic understanding of HTML will allow you to further customize your project outside of the Popcorn interface. We recommend choosing a text editor that shows you syntax highlighting for code.

Free Text Editors

Text Wrangler

Notepad ++

NetBeans

HTMLpad

What it is

Collaborative HTML writing/editing. You can use HTMLPad as a "text editor" specifically for HTML and CSS.

Setup

Go to htmlpad.org

Tips and Tricks

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

Super Awesome Feature

The time slider. The time slider. Watch the evolution of collaborative coding by scrubbing the time slider!

Sample Curriculum

4: Continue Brainstorming 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.

Week Six Assignments

1. Watch the "Week 6: Web Native Storytelling Planning" curriculum video and explore the pop up resources

2: Sketch a Basic Schematic and Make Design Decisions

This summer, 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. Create a storyboard and schematic for your Popcornified video.

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: Create a Presentation

Prepare a presentation of your topic - you'll find it an invaluable way to crystalize your concept. If you feel comfortable, share it with the larger StoryCamp group via video conference. The presentation 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

Week Five Appendix

DIY Report the News

Week Six Appendix

Schematics and Storyboards

mozilla
WEBMAKER

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.

5: Individual Blog post

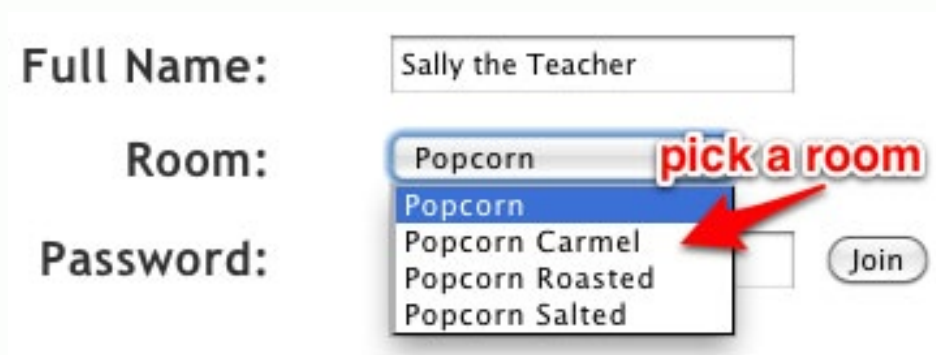Summarize the production plan on your project blog.

Big Blue Button Guide

There are several ways to do web conferencing, the platform we've provided for you is called Big Blue Button.

You can use it to hold meetings and teach others over the web. Big Blue Button is especially useful for learners or facilitators who want to collaborate with one another from different cities.

To hold a meeting, point your web browser to
http://popcorn.bigbluebutton.org

There are four rooms to pick from, just in case someone else has a meeting going on at the same time you would like to hold yours. If room "Caramel" is busy, go ahead and join room "Roasted."

The room passwords will be provided to you by the StoryCamp team.

Visit http://www.bigbluebutton.org/videos/ to watch a couple of short tutorial videos on how to use the software.

This 4:00 minute video (http://www.youtube.com/watch?v=S4eNl9Afipo) will walk you through some of the main features as a presenter with moderator control.

This 3:00 minute video (http://www.youtube.com/watch?v=U8P9RJDk42M) is a walkthrough from the perspective of a user, without moderator control.

If you have any problems, don't hesitate to contact the PopSquad!

Popcorn Reference

Templates

A template provides a visual layout and is usually designed for a specific kind of project. Each template includes only specific plug-ins to keep the JavaScript as lightweight as possible. Clicking the +Popcorn Button at the bottom right of the interface, underneath the "My Events" panel, allows you to add plug-ins that are not specific to the template you've selected. You have to drag the plug-in you'd like to use and drop it in the My Events tray to add it to your template.

You will see the available templates when you load Popcorn in your browser. You can also load your own, custom template by selecting "Other." You can't change your template after you've started a project, so choose carefully. When you click "create," your project will be created, and you'll enter the editor view.

Events

An event is a marker that says "do something" at a specific point in your film. **To add an event to the timeline, you drag and drop the text from the My Events box to the Timeline! To delete an event from the Timeline, you click the event and hit the Delete key on your keyboard.**

Popcorn has a great many plug-ins which allow you to pull events into your timeline. Because there are many plug-ins and templates, there are infinite variations and possibilities. No two Popcorn projects will be the same. But the authoring pattern is always the same: choose a plug-in, add it to the timeline, and configure the event.

Tracks

A Popcorn project can have an infinite number of tracks. Tracks help you, the creator, organize events in the way that seems most logical to you. Maybe you want one track to visualize all the Twitter events. Or maybe you want one track to visualize all the cat-related events. It's up to you.

When you mouse over the name of a track, you'll see an "X" to delete the track. In the track editor, you can see the code for the events that you've assigned to the track.

Saving, Exporting and Publishing

You can save your project, export the code of your project and/or publish your project to the WWW. In the upper right hand corner of the interface are buttons to accomplish these things. Just follow the on screen instructions and share your masterpieces with the world!

Keyboard Shortcuts

Spacebar allows you to Play and Pause the video playback. Using this shortcut will also update the timeline view if the playhead gets lost.

If you click an event and hold down SHIFT, then click another event, you can move both events on the timeline in sync using the arrow keys.

Using the up/down arrow keys allows you to move an event to a different track.

Click on an event and hit the delete key to remove it from the timeline.

Keyboard Keys Image Attribution: Arnaud Nelissen http://www.crystalxp.net/forum/en/profil-22033.htm

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

- How well did your peer show that he/she could gather assets (images, text, video and other data from the web) to voice his/her own opinions in a web native story?

- How well did your peer attribute the resources he/she used? Would you be able to find those resources again?

Evidence of Understanding

- Would you say that your peer really understood this week's theme and why it is relevant to web native filmmaking?

- How well did your peer explain the material in his/her own words?

Evidence of Reflection and Analysis

- How well does your peer's work incorporate feedback from others? Did his/her work change after sharing with and speaking with you or your other peers?

- Would you say your peer expressed a clear opinion on his or her topic (i.e. the theme of his or her project)?

Evidence of Creativity

- Would you say that your peer really had a solid grasp on their topic?

- Would you say that your peer represented another take or perspective on the topic that you had not really thought of before?

mozilla
Webmaker

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.

Robots Invade Everytown video

Step 1: Open the robot template (http://maker.mozillapopcorn.org/templates/supported/robots) in your browser

Step 2: Start by using the Robots Invade Everytown video that is pre-loaded into the template or click the Edit Source button in the upper left-hand corner of the video and change the URL to the URL of the video you want to work with.

Step 3: Double click the title event and change the title. Add other title events to new tracks and double click to change the positionings to middle title or bottom title using the style selector and target selector. If you need a new track, click the Track + button on the lower left-hand side of the interface. Don't forget to include your name somewhere!

ZOINK! Speech bubble

Step 4: After you've clicked done on each of the title events, double click the Speak events on the timeline. You can change the robots speech by typing in new text. Double click to change what the robot voice says and play around with those options.

Step 5: Center the map at second :19 to the location the robots will be invading first. Double Click to set this location and click done.

Step 6: Edit the image event in the timeline around :25. The robots are targeting a specific person. Who is it?

Google Map at :19

Step 7: Double Click the "Zoink" event and change the text. You can also change the bubble style. Try out different positions for your bubble. Play around with the options so that your Zoink bubble is positioned the way you like.

Step 8: Continue adding and editing events until your video is what you want it to be. When you're ready, click the "publish" button and copy and paste your link to save it somewhere. Then, click the "view source" button and save your code. You can also save your project on mozillapopcorn.org by clicking the "save" button.

Step 9: Share with the world. Share your video link widely. Tweet your

DIY Make a Mad Lib

video link with the tag #AllHailRobots

Step 10: 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:

Gutenberg Printing Press

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.

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

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

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

Mozilla Webmaker

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

Its true that on the Web you can find varying degrees of quality. That's because the Web is a medium where anyone can participate - the fact that you can find feature films and cat videos in the same browser is what makes this medium unique.

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/

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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 race 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 Nicephore 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.

Joseph Nicephore Niepce Heliograph

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-

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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.
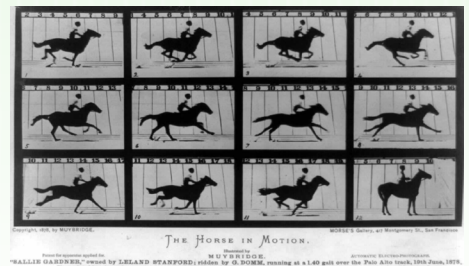

Eadweard Muybridge Running Horses

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 film-making 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 story-telling 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.

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

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DIY Hack a Commercial

Add your own voice to an old commercial by adding pop ups 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 the Prelinger Archives (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 the Popup template (http://maker.mozillapopcorn.org/templates/supported/popup/) in your browser

Step 3: Click the Edit Source button in the upper left-hand corner of the video and change the URL to the URL of the of the commercial you'll be commenting on.

Step 4: Move the popups around. Drag new popup events to the place in the Timeline where you want the popup to appear.
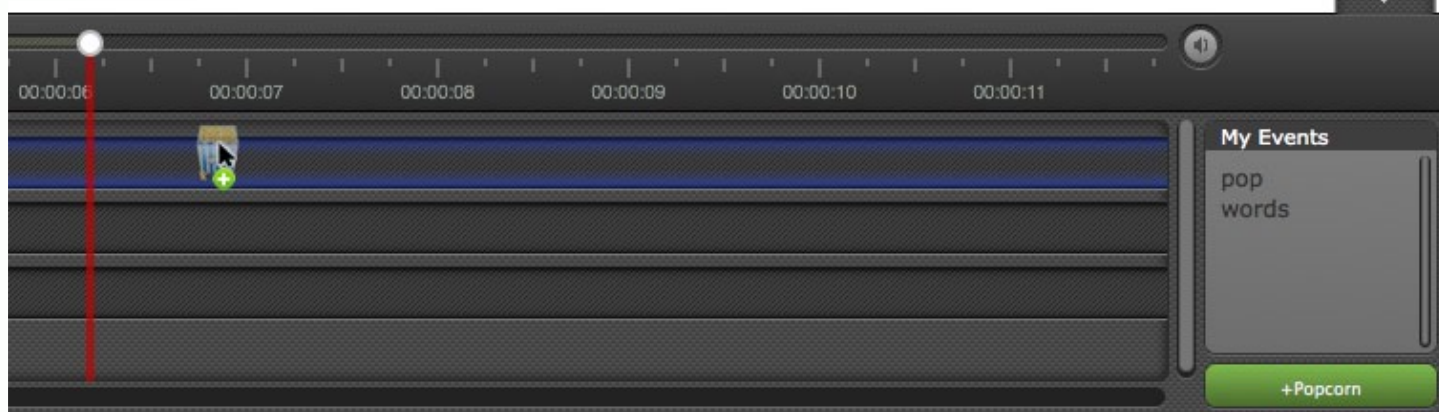
drag the event from the right to the timeline

Step 5: Double Click on an event to adjust the text, position, and sticker for that popup event.

Step 6: Keep adding popup events to the timeline. When you're ready, click the "publish" button and copy and paste your link to save it some-where. Then, click the "view source" button and save your code. You can also save your project on mozillapopcorn.org by clicking the "save" button.

Step 7: Share with the world. Share your video link widely.

Step 8: Iterate your project based on feedback you receive.

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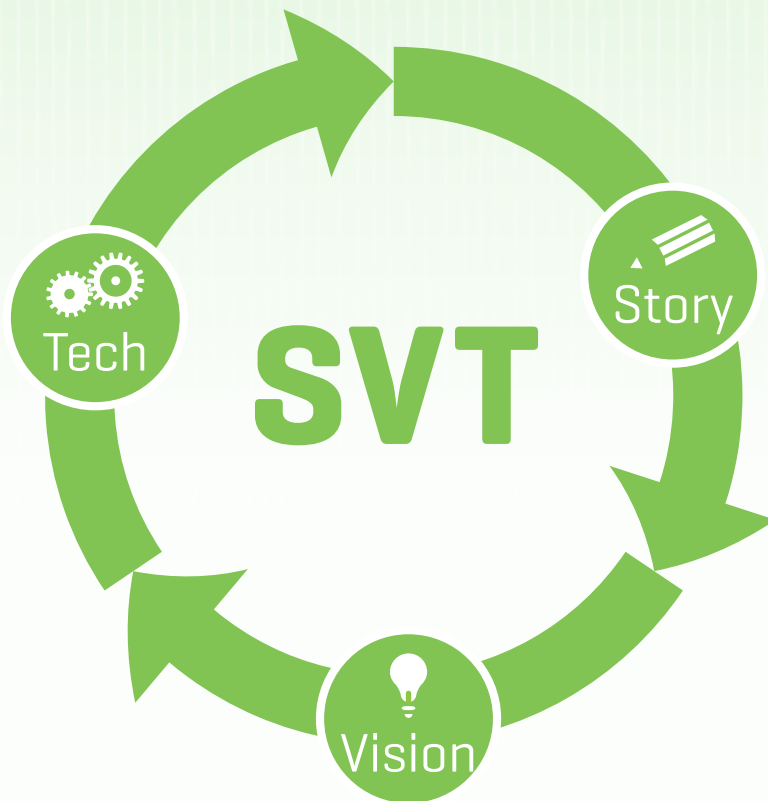
This process doesn't just help the organization of content, it also helps you begin to think about production resources you will need and a time plan.

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

SVT

Story

Vision

Tech

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.*

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 re purposing 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."

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

Add lower thirds and extra video footage to create a newscast about any topic you choose.

Step 1: Find or record a video you would like to use for your Newscast. If you create your own video, upload it to YouTube. Once you've found or made something to work with, open the Newscaster template (http://maker.mozillapopcorn.org/templates/supported/newscaster/) in your browser

Step 2: Click the Edit Source button in the upper left-hand corner of the video and change the URL.

Step 3: Double Click the text event located on the timeline and change the text to "A Report by:" with your name. Change the next text event to include information about your newscast. Click done.

Step 4: Double Click the title card event on the timeline. Change the text and the timing if you prefer. Click done.

Step 5: Double Click the photo event and switch out the image. Add an image by dragging it from your desktop or entering a URL. You can resize the image by entering a new value in the width box or by clicking and dragging in the viewport. Click done when you are finished.

Step 6: Change the text of the Zoink event and reposition it.

Step 7: Keep adding events to the timeline. Experiment with the mediaspawner and shrink events. Double click events on the timeline to change that event's settings.

Step 8: When you're ready, click the "publish" button and copy and paste your link to save it somewhere. Then, click the "view source" button and save your code. You can also save your project on mozillapopcorn.org by clicking the "save" button.

Step 9: Open your code in a Text Editor and change the logo and cube from KNN Report to whatever you choose. Look for "KNN News" in the code and switch out the text.

Step 10: Share! Iterate your project based on feedback you receive.

Newscaster template with lower third

Titlecard options

Find the "KNN Report" text in the code

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Schematics and Storyboards

Schematics: Be open to *your* creativity

There's no one way to organize information or a right way to create a schematic. You just have to think about how a user will experience your story. Where do they go first? What do they do there? What do they see and hear? Where could they go next? How do YOU draw that out so that you can both understand it and help others understand your vision?

The image above shows the most basic schematic for websites. It is simply showing the hierarchy of pages. In the sidebar are a couple of other types of schematics from various real world projects. Notice how they are different, notice how they are the same.

Each drawing represents the creators thought process in how her project should be structured to meet her vision. These are very basic drawings, but they can become as complex as you need them to be. Schematics can be incredibly helpful when figuring out your ideas and when explaining an overarching concept to people.

Storyboards: Sequencing For the Win
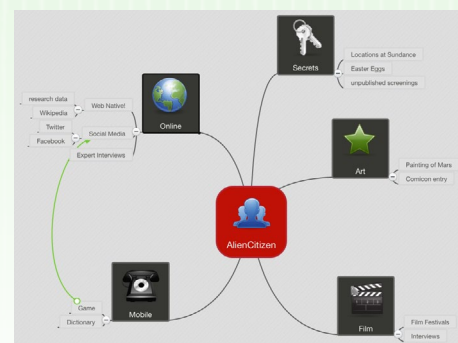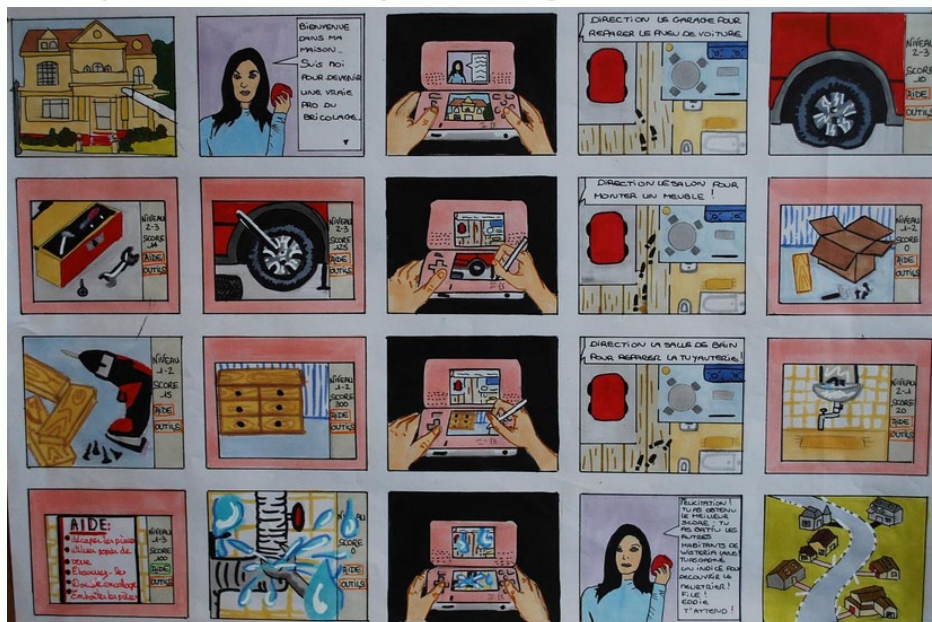
Image Attribution: Design Recher - http://www.flickr.com/photos/designetrecher-che/5461209713/sizes/l/in/photostream/

This image shows a mind map. Categorizing terms and drawing connections between them helps you see how any project (interactive or not) piece relates to another. Very helpful as an initial brain dump!

This image shows a webpage layout and a video interface. It's a basic wireframe of how content might be presented on the page. In fact, this was the very first wireframe for the StoryCamp Cinema page.
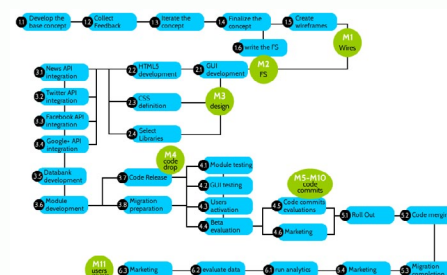
This image shows a phase plan for a web project. It shows which tasks are reliant on others and what can be completed in tandem.

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Schematics and Storyboards

A Storyboard shows each scene of a story in sequential order. They can be detailed down to the nanosecond or they can serve as a rough outline for how the story is going to visually unfold. Laying out the story this way will help you keep focus. You can also add a layer on top to indicate user interactions or additional information you'd like to bring into the story.

Animatics are Storyboards laid out on a timeline. Chris Milk created a very cool Animatic for the Wilderness Downtown (http://vimeo.com/14945495), and we recommend checking it out.

Storyboards, like everything we do to plan and prepare a project, usually go through a series of iterations. Your initial Storyboard might very well be a scribble on a scrap of paper (what we refer to as a "napkin sketch").

Make Both!

Both Schematics and Storyboards can be as complicated as you need them to be. Remember, there's no right way to do it, no single solution, but creating schematics and storyboards will help you focus on and iterate your Story, Vision and Tech.

Free Tools for Schematics and Storyboarding

There are tons of different collaborative flowcharting, wireframing and schematic making programs that are free and fairly intuitive to use. It might take some trial and error to find one that you like, but here are some examples of online apps that people at Mozilla use:

LucidChart

Go to LucidChart
http://lucidchart.com

Mockingbird

Go to GoMockingbird
http://gomockingbird.com

Cacoo

Go to Cacoo

http://cacoo.com

Mindmeister

Go to Mindmeister

http://mindmeister.com

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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.

City Slicker Farms plants gardens to renew communities

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

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.

Huey Newton adresses a crowd in Oakland

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

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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/creativegrowth/about.html