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Team X- Sponsor: Geoff Ward  
**Public Interface for Contributing to a  
Database of Incidents of Racial Violence**

Christie Nambu, Eric Tian, HQ Pham-Nguyen, Vamsi Koduru

# Initial Problem and Sponsor Needs



## Unrecorded

Accounts of racial violence were often not recorded by official media sources. therefore a huge number of incidents went unrecorded, only remembered by the family and friends of those that were affected by the violence.



## Collecting

Professor Ward's research revolves around collecting these non-recorded accounts of historical racial violence in the south and finding patterns in violence and their correlation to modern day events.



## Contribute

Sponsor wants a system that the general public can use to contribute to his evolving database with their personal or family accounts of racial violence

# Usability Problems and Initial Goals



**Needs to be accessible to a large public audience.**



**A system that a wide variety of users can use and would be receptive to.**



**Must have a way to add events/incidents to a running database**

# Methods Used Throughout the Project



## Sponsor Meetings

Get a scope of the project and more details.



## Initial Planning

Discussing and planning our approach to the problems and the project



## Creating Prototypes

Iterative improvements towards the final design.



## User Testing

Getting valuable feedback on prototypes



## Professional HCI Methods

Heuristic evaluations on our prototype and Cognitive Walkthroughs



# Progress & Insights

## Observational Study

Prototype: Iteration 1

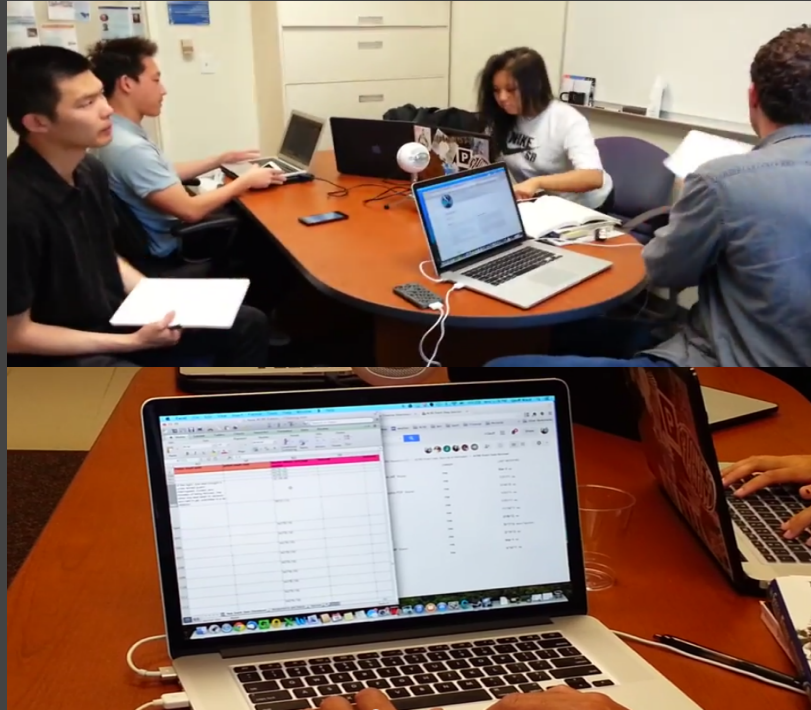
User Testing with Think Alouds

Heuristic Evaluation

Cognitive Walkthrough

Prototype: Iteration 2

User Testing with Think Alouds



# Progress & Insights

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Observational Study

## **Prototype: Iteration 1**

User Testing with Think Alouds

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Prototype: Iteration 2

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# Progress & Insights

Observational Study

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## User Testing with Think Alouds

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Prototype: Iteration 2

User Testing with Think Alouds

	A	B	C	D	E
1		QUESTIONS	User 1	User 2	User 3
2		1 How hard was it for you to figure out how to add an entry on a scale of 1-5? (5-Hard, 1-Easy)	Once he knew, like a 2-3 because he didn't know we could type	1 cause the entry button was right there in front of you	1 was pretty obvious
3					
4		2 Was there something missing you were expecting to see?	No, you explained there wasn't going to be any way to write stuff	I was expecting the timeline to have more dates click on it see more incidents Yeah i noticed there was a homepage and this is where the data is gonna be	what caught her off guard was at the end- weird that there was a picture so i was just like oh i guess i wasn't supposed to put a picture; i didn't see anything where i could have added a picture
5					
6		3 Could you tell what each page was about?	Yeah, it was pretty clear	Make it more simple would be better	yeah it was, esp the set up for entering looked like fill out documents so it was straightforward in that sense
7					
8		4 Was anything too hidden?	At first he didn't know if could write, but as soon as that, it was pretty easy	I don't think so	everything was pretty straightforward
9					
10		5 How intuitive and helpful is the navigation system on a scale of 1-5?	a 3		a 1- really helpful... from her experience- everything is at the bottom not randomly put 2 everywhere
11					
12		6 If you could change one thing about the site, major or minor, what would it be?	"i can't really say right now, cause he knows it's the first version" he said if it is updated and not hand drawn then he could give more feedback	I think there should be a section on the homepage with things already in the data so if want to look at incidents not searching something can do that so don't have to search	not that i would chagne it but i am kind of confused what the timeline is in relation to the chart is there a dot for every incident that happened or am i in a different time period or something
13					
14					
15					

# Progress & Insights

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Prototype: Iteration 2

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### Contributing to Database With Incidents of Violence

Team X, Christie Nanson, Eric Tien, HQ Pham-Nguyen, Yanni Koduru

#### Heuristic Evaluation - A System Checklist

##### 1. Viability of System Status

The system should always keep user informed about what is going on, through appropriate feedback within reasonable time.

#	Review Checklist	Yes	No	N/A	Comments
1.1	Does every display begin with a title or header that describes screen contents?	x	0	0	
1.2	Is there a consistent icon design scheme and style/size treatment across the system?	x	0	0	
1.3	Is a single, selected item clearly visible when surrounded by unselected items?	x	0	0	
1.4	Do menu, instructions, prompts, and error messages appear in the same places on each screen?	x	0	0	
1.5	In multiple data entry screens, is each page labeled to show its relation to others?	x	0	0	
1.6	If overlay and insert mode are both available, is there a visible indicator of which one the user is in?	0	0	0	
1.7	If pop-up windows are used to display error messages, do they allow the user to do the work in error?	0	0	x	no error messages used
1.8	Is there some form of system feedback for every operator action?	x	0	0	
1.9	After the user completes an action (or group of actions), does the feedback indicate that the next group of actions can be started?	x	0	0	
1.10	Is there visual feedback in menus or dialog boxes about which choices are selectable?	x	0	0	
1.11	Is there visual feedback in menus or dialog boxes about which choice the cursor is on now?	0	0	x	Not able to type (ie no cursor)
1.12	If multiple options can be selected in a menu or dialog box, is there visual feedback about which options are already selected?	x	0	0	
1.13	Is there visual feedback when objects are selected or moved?	x	0	0	
1.14	Is the current status of an icon clearly indicated?	x	0	0	

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##### 2. Match Between System and the Real World

The system should speak the user's language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

#	Review Checklist	Yes	No	N/A	Comments
2.1	Are icons consistent and familiar?	0	0	x	We didn't use that many icons
2.2	Are menu choices ordered in the most logical way, given the user, the item names, and the task variables?	x	0	0	
2.3	Is there a natural sequence to menu choices, but it's been used?	0	0	x	We have navigation buttons but not really a menu
2.4	Do related and independent fields appear on the same screen?	x	0	0	Yes we use old menu page
2.5	If shape is used as a visual cue, does it match cultural conventions?	0	0	x	
2.6	Do the selected colors correspond to common expectations about color codes?	0	0	x	No colors in our paper prototype
2.7	When prompts imply a necessary action, are the words in the message consistent with that action?	x	0	0	Preview, Submit etc
2.8	Do keyboard references in prompts match actual key names?	0	0	x	
2.9	Do data entry screens, are tasks described in terminology familiar to users?	x	0	0	
2.10	Are field-level prompts provided for data entry screens?	x	0	0	
2.11	For questions and answer interfaces, are questions stated in clear, simple language?	x	0	0	
2.12	Do menu choices fit logically into categories that have readily understood meanings?	x	0	0	
2.13	Are menu titles parallel grammatically?	0	0	x	
2.14	Does the command language employ user jargon and avoid computer jargon?	x	0	0	
2.15	Are command names specific rather than general?	x	0	0	
2.16	Does the command language show both full names and abbreviations?	0	0	x	
2.17	Are input data codes meaningful?	0	0	x	
2.18	Have uncommon letter sequences been avoided wherever possible?	0	0	x	
2.19	Does the system automatically error handling or realigning to align related points?	0	0	x	
2.20	Does the system automatically error a dollar sign and decimal for necessary entries?	0	0	x	

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#	Review Checklist	Yes	No	N/A	Comments
1.15	Is there feedback when function keys are pressed?	x	0	0	
1.16	If there are observable delays (given that fifteen seconds is the system's response time, is the user kept informed of the system's progress?)	0	0	x	No observable delays
1.17	Are response times appropriate to the task?	x	0	0	
1.18	Typing screen systems, screen activation: 30-150 milliseconds	x	0	0	Minor violation
1.19	Simple, frequent tasks: less than 1 second	x	0	0	
1.20	Common tasks: 2-4 seconds	x	0	0	
1.21	Complex tasks: 4-12 seconds	0	0	x	No complex tasks
1.22	Are response times appropriate to the user's cognitive processing?	x	0	0	
1.23	Continuity of thinking is required and information must be remembered throughout screen responses: less than two seconds	x	0	0	
1.24	High levels of concentration aren't necessary and remembering information is not required: two to fifteen seconds	x	0	0	
1.25	Is the menu naming terminology consistent with the user's task domain?	x	0	0	
1.26	Does the system provide usability? That is, by looking, can the user tell the state of the system and the alternatives for action?	x	0	0	
1.27	Do GUI menus make obvious which items have been selected?	x	0	0	
1.28	Do GUI menus make obvious whether deactivation is possible?	0	0	x	No need for deactivation
1.29	If users must navigate between multiple screens, does the system use context labels, menu maps, and other means to save operational loads?	0	0	x	Need to add menu map/place markers on our graphical side

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##### 4. Consistency and Standards

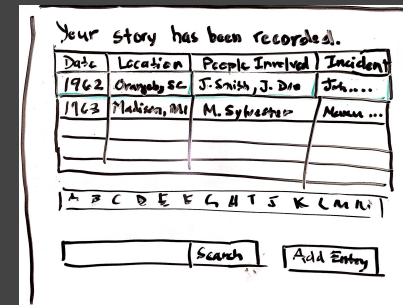
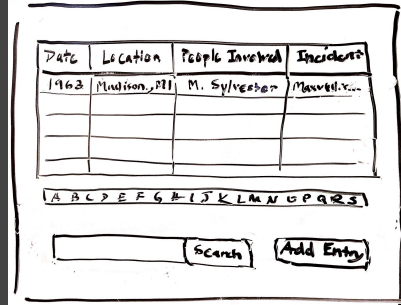
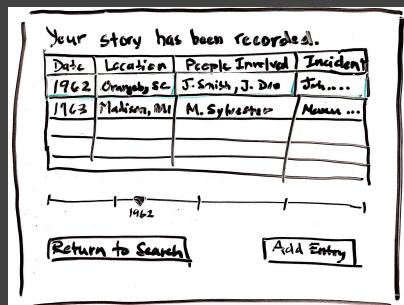
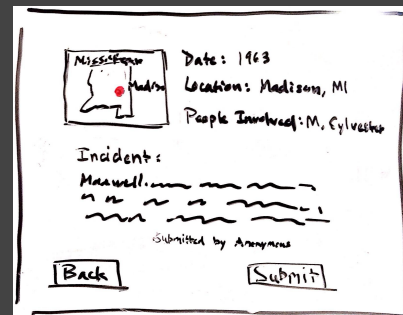
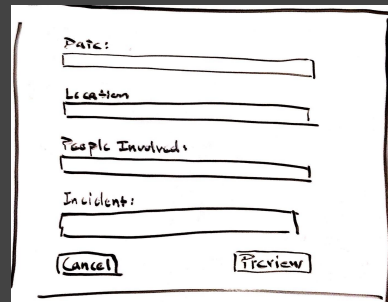
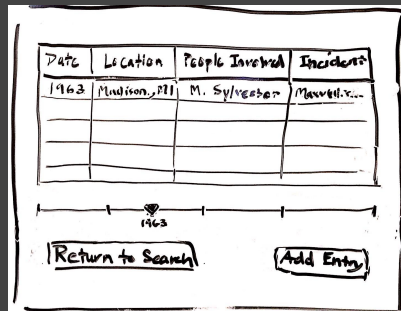
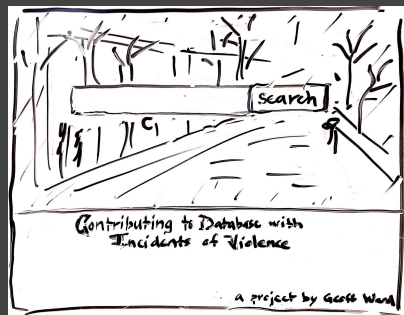
Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

#	Review Checklist	Yes	No	N/A	Comments
4.1	Have industry or company formatting standards been followed consistently in all screens within a system?	0	0	x	No specific company standards were given to us
4.2	Has a heavy use of all-uppercase letters on a screen been avoided?	0	0	x	Titles include all uppercase letters
4.3	Do abbreviations not include punctuation?	0	0	x	No abbreviations used
4.4	Are screen titles justified and not numbers/initials aligned?	0	0	x	Screen's show the type of detailed formatting yet
4.5	Are icons labeled?	x	0	0	
4.6	Are there no more than twelve to twenty icons per screen?	x	0	0	
4.7	Are there seldom visual cues to identify the active window?	0	0	x	
4.8	Does each window have a title?	x	0	0	
4.9	Are vertical and horizontal scrolling possible in each window?	0	0	x	No horizontal scrolling, only some vertical scrolling
4.10	Does the menu structure match the task structure?	x	0	0	
4.11	Have industry or company standards been established for menu design, and are they applied consistently on all menu screens in the system?	0	0	x	Again, no specific standards have been given to us
4.12	Are menu choices less than 30 characters long?	x	0	0	
4.13	If "off" is a menu choice, does it always appear at the bottom of the list?	x	0	0	
4.14	Are menu titles either centered or left-justified?	x	0	0	
4.15	Are menu items left-justified, with the item number or mnemonic preceding the name?	x	0	0	Menu item number preceding title
4.16	Do embedded field labels appear to the right of the field label?	x	0	0	
4.17	Do on-line instructions appear in a consistent location across screens?	0	0	x	No instructions
4.18	Are field labels and fields distinguished typographically?	x	0	0	
4.19	Are field labels consistent from one data entry screen to another?	x	0	0	

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# Progress & Insights



# Progress & Insights

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Observational Study

Prototype: Iteration 1

User Testing with Think Alouds

Heuristic Evaluation

## **Cognitive Walkthrough**

Prototype: Iteration 2

User Testing with Think Alouds

# Progress & Insights

Observational Study

Prototype: Iteration 1

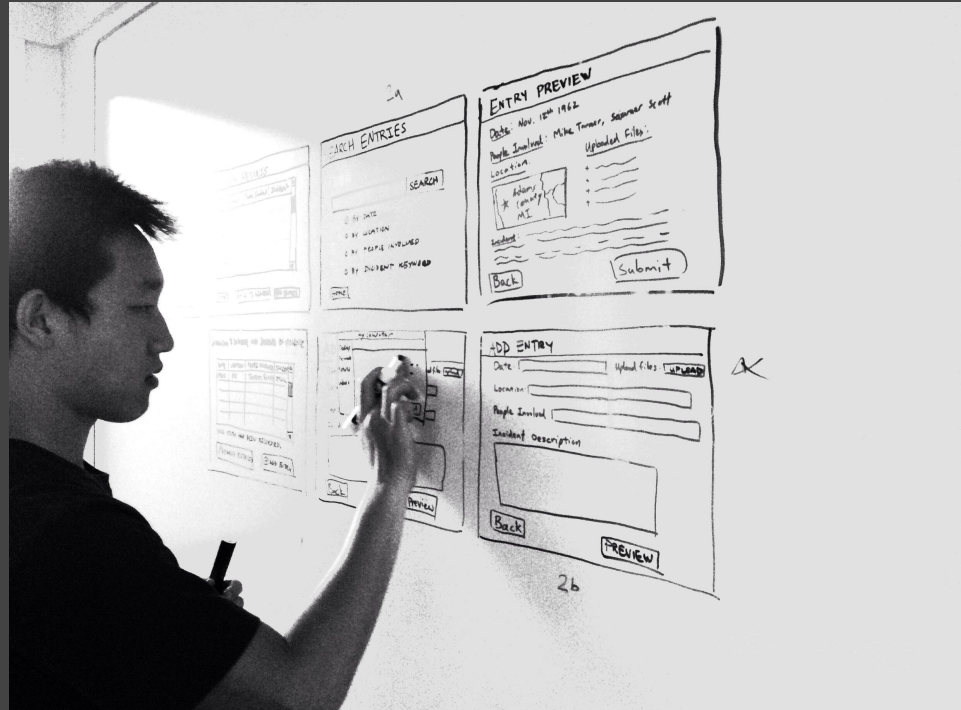
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## Prototype: Iteration 2

User Testing with Think Alouds





# Progress & Insights

CONTRIBUTING TO DATABASE WITH INCIDENTS OF VIOLENCE

Date	Location	People Involved	Incident
1968	MARSHFIELD	R. GILBERTSON	MAN...

SEARCH RESULTS

Date	Location	People Involved	Incident
1964	KROON AC	WISCONSIN, HORRIST MAN	

SEARCH ENTRIES

1964

- BY DATE
- BY LOCATION
- BY PEOPLE INVOLVED
- BY INCIDENT KEYWORD

ENTRY PREVIEW

Date: 1962 NOVEMBER 12

People Involved: Mike Turner, Sawyer Scott

Location:

Uploaded Files:

- +
- +
- +

Incident:

CONTRIBUTING TO DATABASE WITH INCIDENTS OF VIOLENCE

DATE: 1963 MARCH 13

PEOPLE INVOLVED: M. SYLVESTER

LOCATION:

UPLOADED FILES:

- +
- +
- +

INCIDENT: Maxwell was w...

CONTRIBUTING TO DATABASE WITH INCIDENTS OF VIOLENCE

DATE	LOCATION	PEOPLE INVOLVED	Incident
1962	MI	TURNER, SCOTT MAN	

YOUR STORY HAS BEEN RECORDED.

my computer

AD

Out

Loc

People

Incident Description:

ADD ENTRY

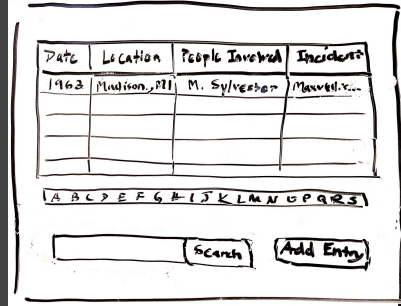
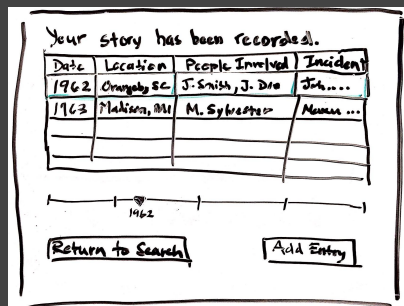
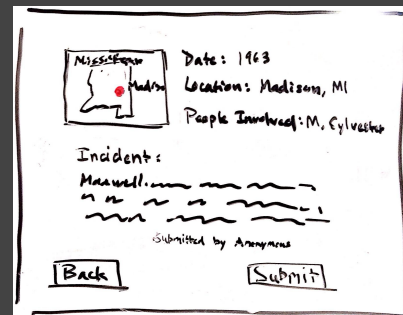
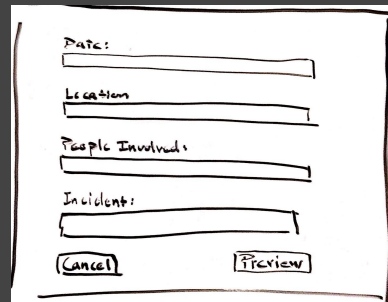
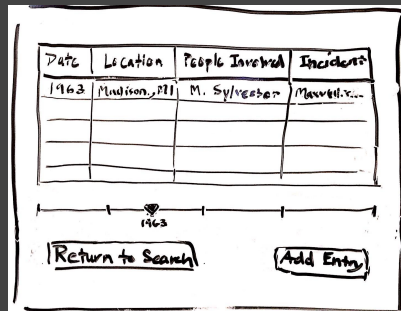
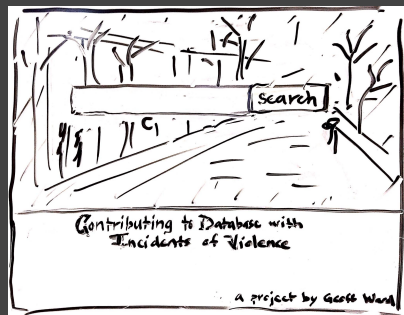
Date:

Location:

People Involved:

Incident Description:

# Progress & Insights



# Progress & Insights

Observational Study

Prototype: Iteration 1

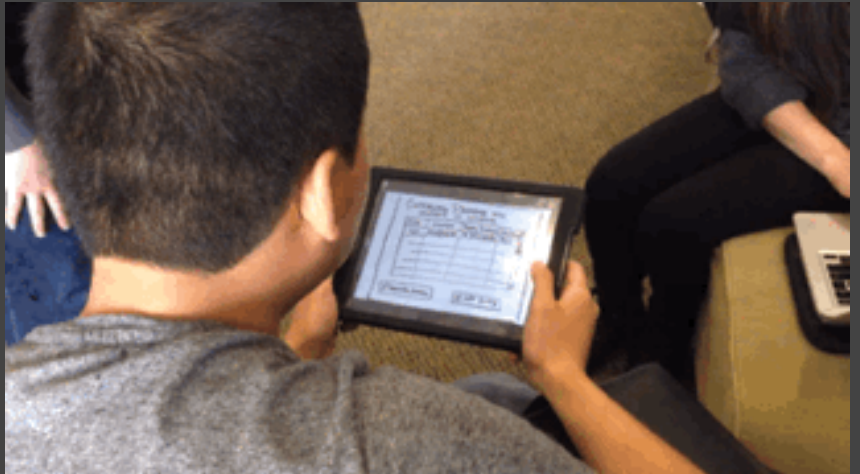
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Prototype: Iteration 2

**User Testing with Think Alouds**



# Problems Encountered During the Project

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**Not able to observe actual researchers and students entering data**

**Our paper prototyping application had limitations:**

- Too many screens needed to make a fully coherent mockup
- Only able to test interface using iPad, not on an actual computer
- Had difficulties cropping and fitting the picture to the application specifics

**Some test users did not give much feedback:**

- Most people tended to blame themselves rather than the interface despite our reassurance.

# Decisions That Still Need to be Made



Do we need to make another prototype iteration or create the final mockup?



What to use to make the high fidelity, final mockup? Photoshop? Balsalmic? Wireframing?



Final format of the mockup? And how are we delivering the final mockup to our sponsnr?

# Timeline for the Remainder of the Project

