Generate Deliverable - Situated Biology

Team Details :

Name	Unity ID
Webb Chawla	vchawla3
Tyler Albert	tralber2
Brantley Collins	bjcollin
Chengyuan LIU	cliu32
Joseph Ly	jly
Ryan Mee	rpmee
Shrikanth Narayanaswamy Chandrasekaran	snaraya7

Deliverables

Inspirational Products for Demos

Product	Member	Ideas
1. Apple iPhone	Shrikanth N C	Locate and capture picture of trees form mobile devices.
2. NatGeo Mapmaker	Ryan Mee	Overlay ranges on top of a map. Add and remove ranges.
3. Google Maps	Terrence	Give the information of position as well as real satellite view display of the surroundings
4. League of Legends	Tyler	Give an angled, aerial view of the particular geographic location
5. Drones	Shrikanth N C	Automated navigation from a remote location. To capture tree

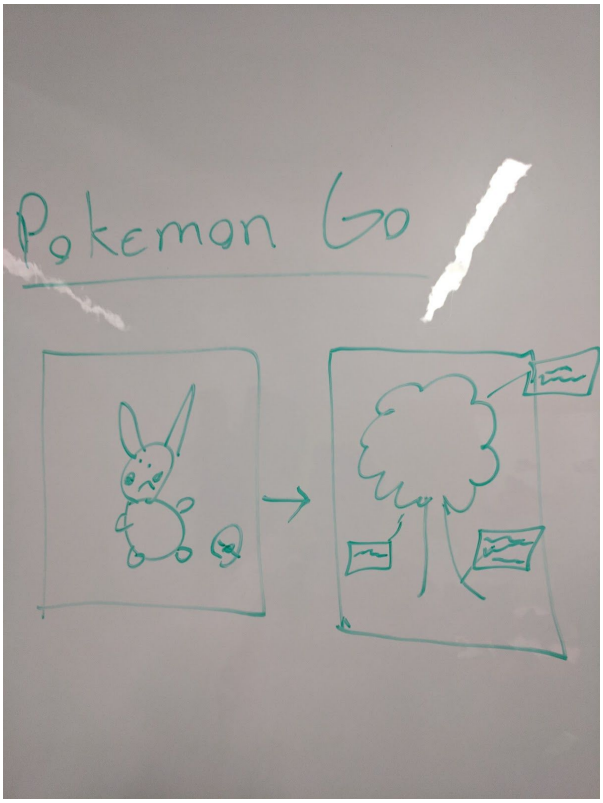
		data (image) using drones.
6. Vive	Ryan Mee	Virtual Reality view of trees from different angles.
7. Steam	Tyler	Use overlapping cards/tiles/snapshots in a list to show “next thing”
8. Arcgis	Terrence	Combine the attribute with the spatial data
9. IBM Watson	Shrikanth N C	Answer student’s technical queries without instructor support.
10. Inquire Biology	Shrikanth N C	An Intelligent Textbook that allows interactive learning.
11. Open NLP	Shrikanth N C	A software product to support Natural language based interaction in the web site.
12. Apple Time Lapse	Webb	Show progression of trees over seasons and years, range changes over time.
13. Baseball Cards	Ryan Mee	Informational cards for quick viewing and comparisons.
14. Slack	Webb	Powerful communication/chat technology with a lot of extensibility.
15. Reddit	Ryan Mee	Easy to follow comment tree structure for conversations.
16. Skyline Global	Terrence	Display 3-D scenario
17. Beyond compare	Shrikanth N C	Compare two trees side by side to learn by understanding their difference.
18. Zillow	Webb	Map functionality from which you can select items and view details about it.
22. Pokemon GO	Joseph	Interact through trees on a live map through augmented reality.

23. Apple Maps	Brantley	Alternative to Google Maps for displaying the locations of trees

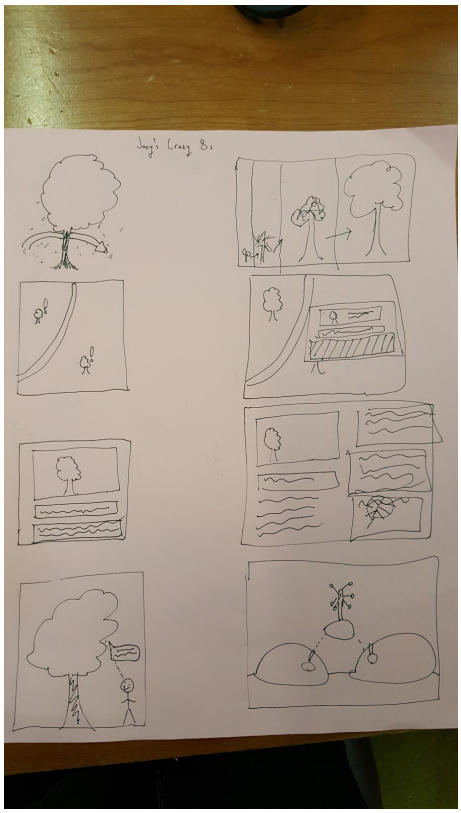
Joseph:

- VR, AR, 3D video for viewing trees
- Map viewing with points of interest (trees)
- Information of trees displayed like trading cards

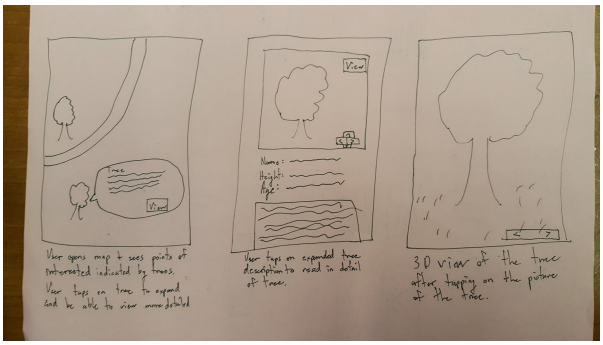
Demo Sketch



Crazy Eights



Storyboard



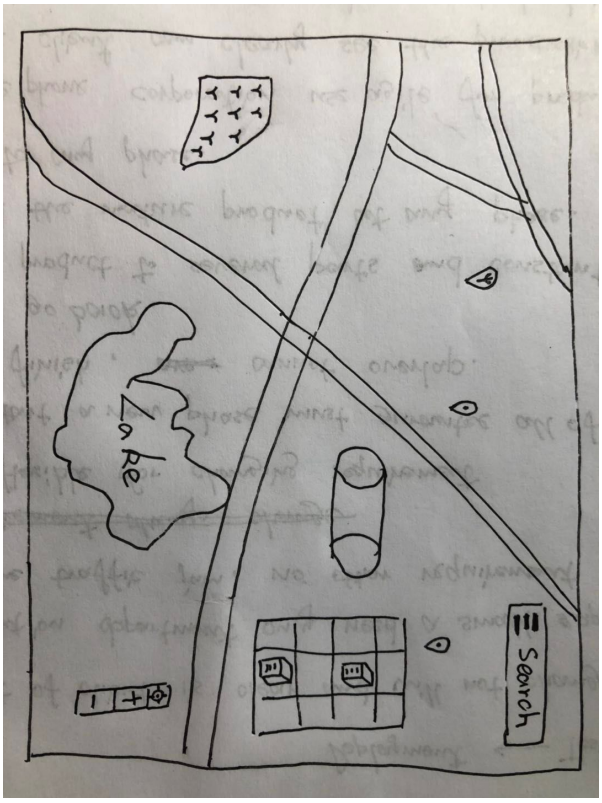
Storyboard Description

The user opens to app to the map section. The first panel depicts of a user tapping on a tree to read a brief description of the app and getting the option to go to a page with more details. The second panel depicts of a “baseball card” format of displaying details about a specific tree. The third panel shows the user picking the 3D view option of the baseball card to view the tree in 3D.

Terrence:

- Real view of the surrounding environment
- Portal to manage the user permission to the system
- Compare the information of different trees.

Demo Sketch



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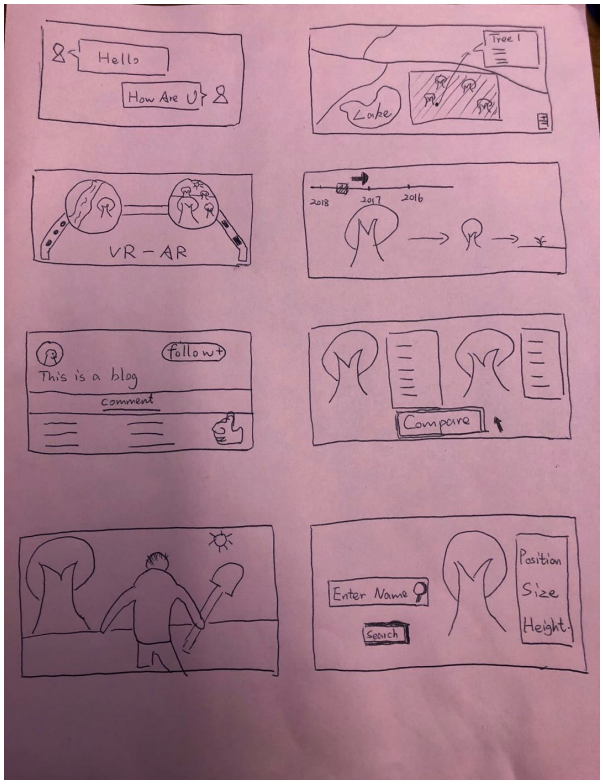
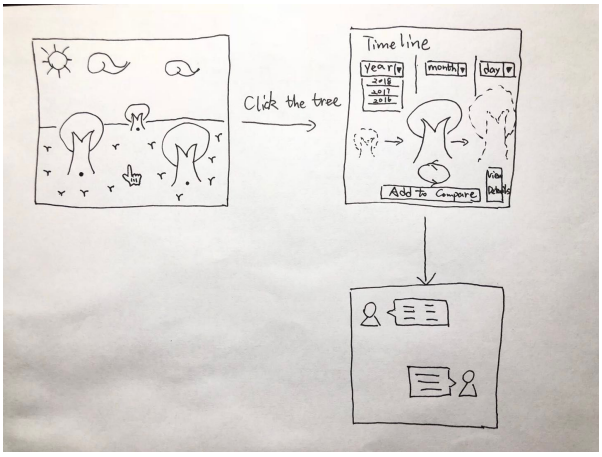


Storyboard



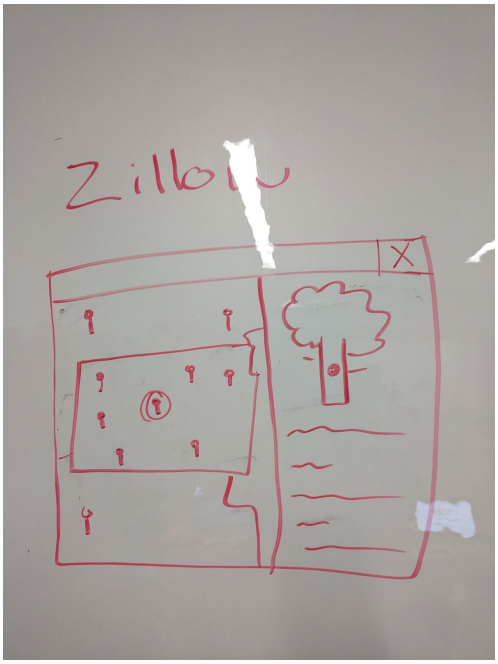
Storyboard Description

This storyboard shows the process of navigating to the map screen, being able to select one or two trees. Then users can select the data to see the change through the timeline for the same tree, then can add one into comparison with others, also there is a button to view details, besides there will be a blog section for uses to chat or post some comment on the website.

Webb:

- Viewing the lapse of trees as they grew
- Map to view and select trees for detail comparison
- Within the details have picture of tree (including time lapse) and information about tree
    - Be able to select another tree at this point to compare

Demo Sketch



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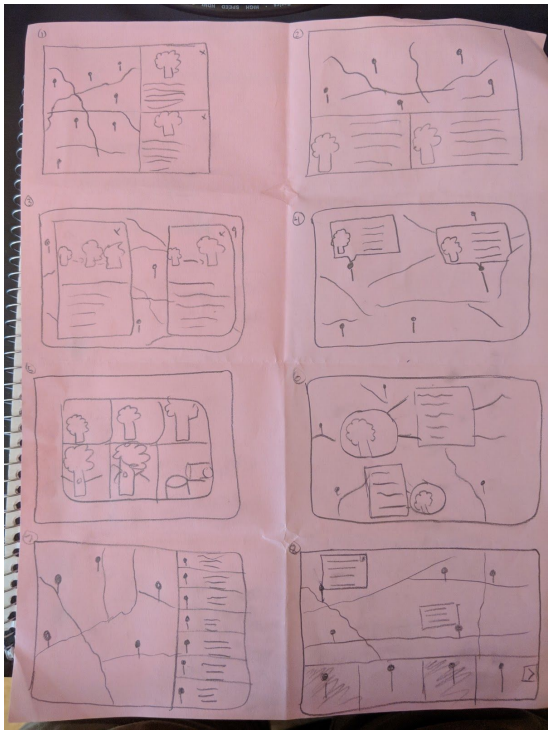
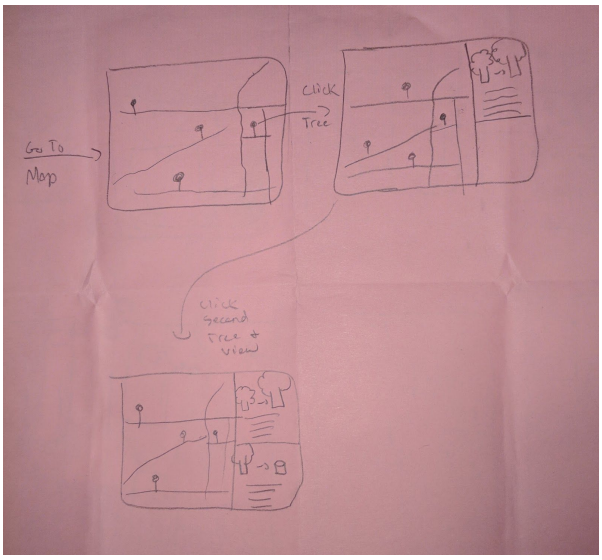


Storyboard

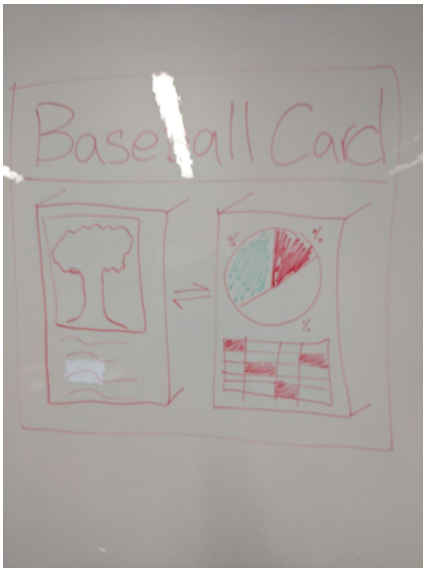
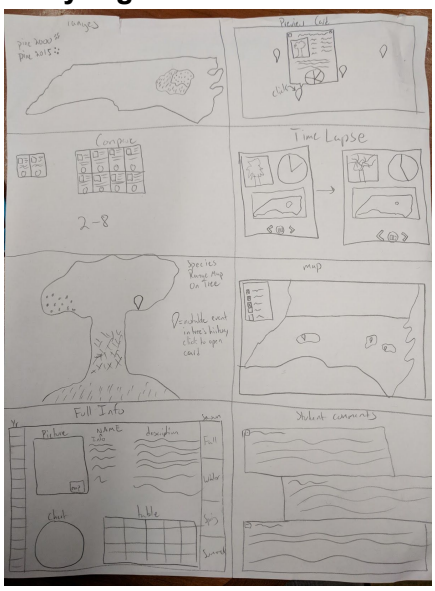
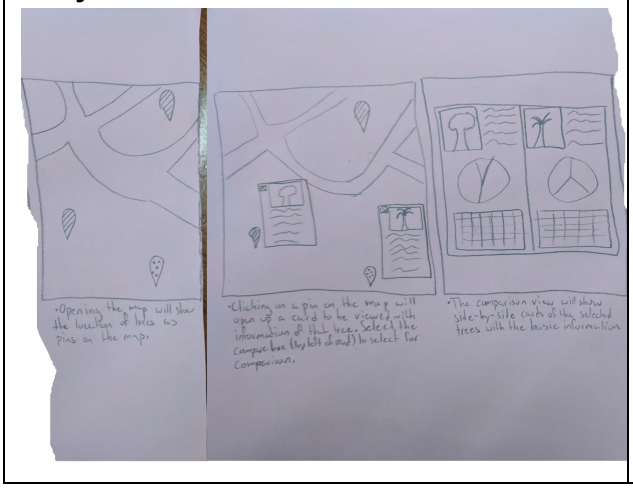


Storyboard Description

This storyboard shows the process of navigating to the map screen, being able to select one or two trees. Then have their information (details including time-lapse) appear side by side so you can compare them. You can easily select other trees as the map view is still available as well.

Ryan Mee

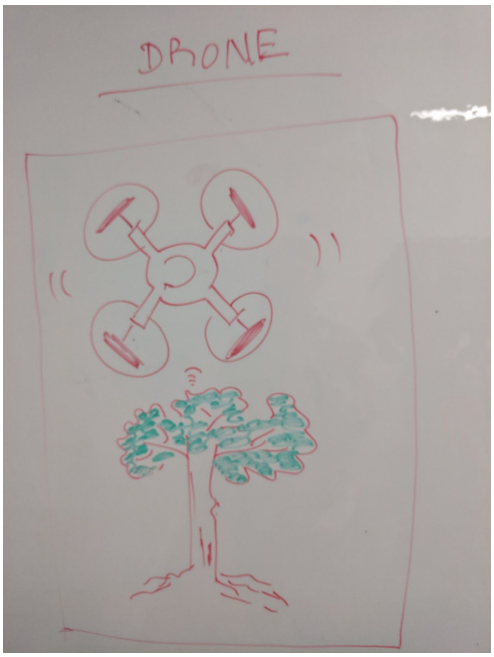
- Cards can be used to provide simple but informative information of different aspects including trees, leaves, bacteria, etc.
- Color overlays on top of maps can be used to show species ranges. This can be used to show range changes over time.
- Time lapse can be used to show the changes of a tree over a period of time. This can be used to tell the “story” of the tree.

Demo Sketch	**Crazy Eights**
	
Storyboard	**Storyboard Description**
	This storyboard shows the process of opening the map of the application and selected two or more tree from cards accessed through pins for comparison. Once selected, the trees are shown with a side-by-side view so that the student can easily compare the two.

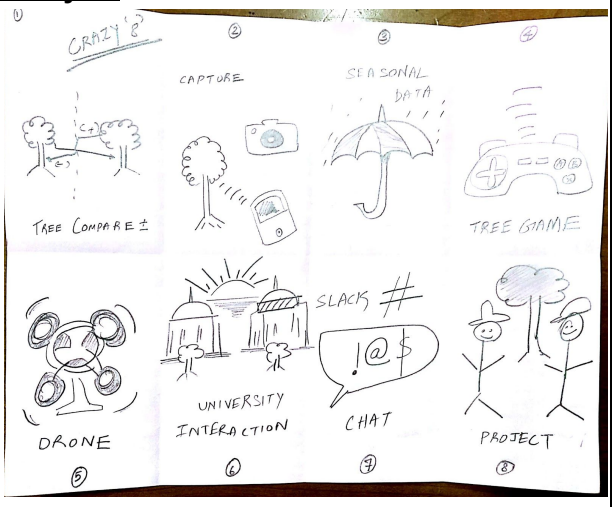
Shrikanth N C:

- Students can learn by comparing two trees side by side.
- Remote capturing of tree data using drones.
- An app that outputs details of the tree based on the photos that student captures using an ipad/phone.

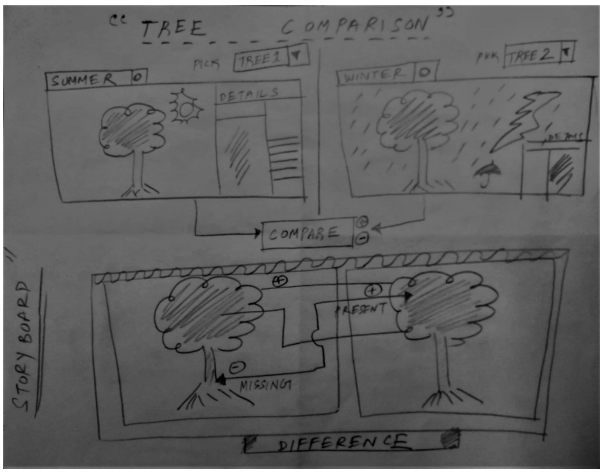
Demo Sketch



Crazy 8s



Storyboard

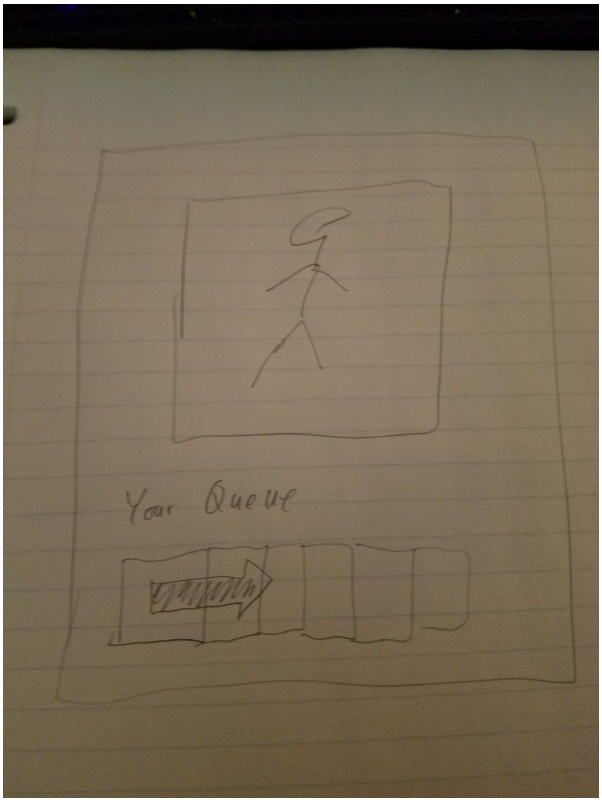


Storyboard description: Comparing two trees side by side based on seasons. The resulting windows displays the commonalities and differences between two trees. Comparison extend to not just seasons but other attributes in the ecosystem. Its known that we learn better by comparing.

Tyler Albert:

- Tree displays should be aesthetically pleasing and graphically engaging
- Trees should have drill-down menus for viewing info widgets about that tree
- There should be some sort of selection mechanism for switching between geographic regions

Demo Sketch



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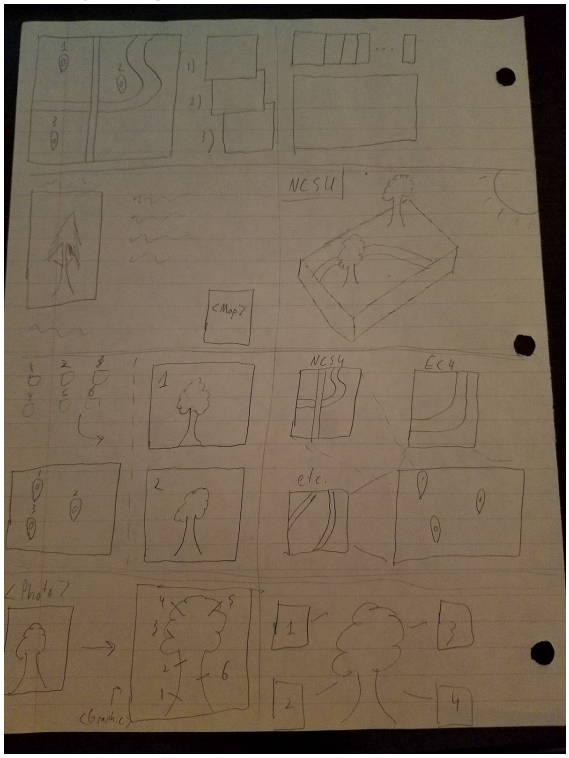

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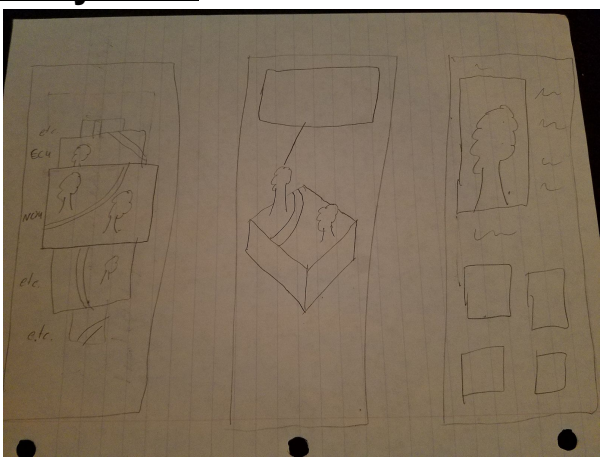
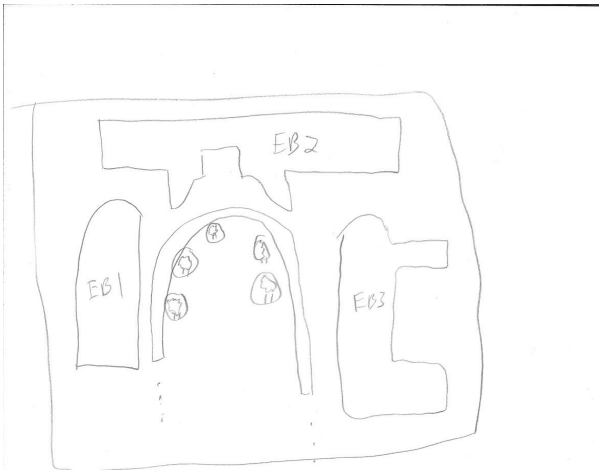


Storyboard description

The user navigates to the geographic location selection page. Then, they select a particular location, such as NCSU. Then, the NCSU map is rendered in some sort of aerial view with clickable tree widgets. Upon clicking a tree, a drill-down page is brought up with descriptions of the tree as well as widgets for bacteria and other such things on this tree.

Brantley Collins:

- Google Maps API to overlay actual satellite data, to get a big picture of the trees
- Select trees directly on the map
- Utilize Google's image data

<table>
<tr>
<td>Demo
 
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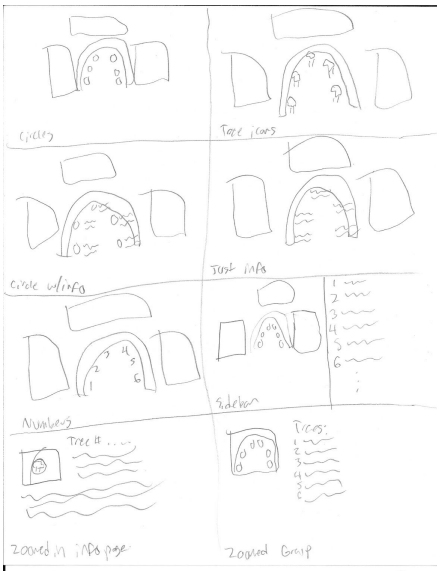
<td> 

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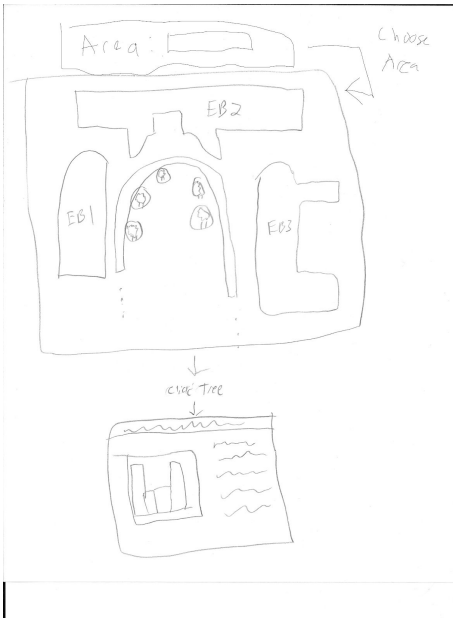
<td> 
</td>
<td>The Storyboard shows a map view (with Google's Satellite images) of a given area, in this case, The Oval on Centennial. When a tree is clicked, it will then bring up a page with graphs and other relevant information</td>
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</table>