Prototype : 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

Tools Used:

- ❖ Balsamiq (cloud)
- ❖ Google slides
- ❖ MS paint

Roles:

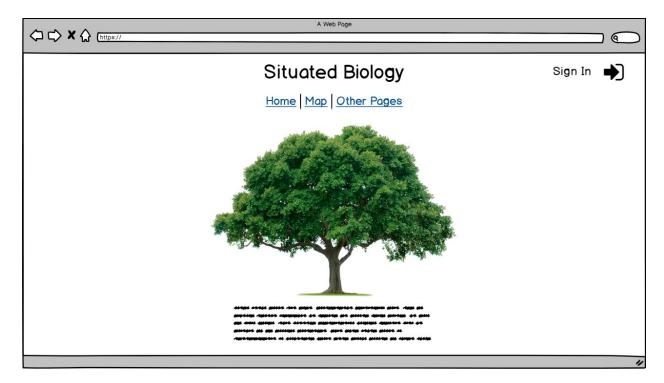
Name	Role
Webb Chawla	Added some linking for navigation between pages and to the Timeline page
Tyler Albert	Tested prototype navigation as well as recording trial information
Brantley Collins	Worked on most of the links between pages, and tested the navigation as a whole

Chengyuan LIU	Season View report pages, download page, check the link between pages.
Joseph Ly	Home page, University Map Page, and NCSU Map page
Ryan Mee	Tree Cluster View, Street View, 3D View
Shrikanth Narayanaswamy Chandrasekaran	Login page, Registration page and Final Timeline and reports.

Prototype: Proposed Mockup

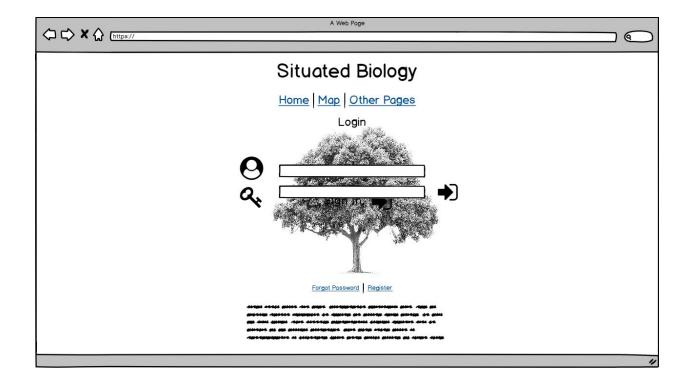
Home

This is the page greeted by all users, giving a brief overview of the purpose of the site.



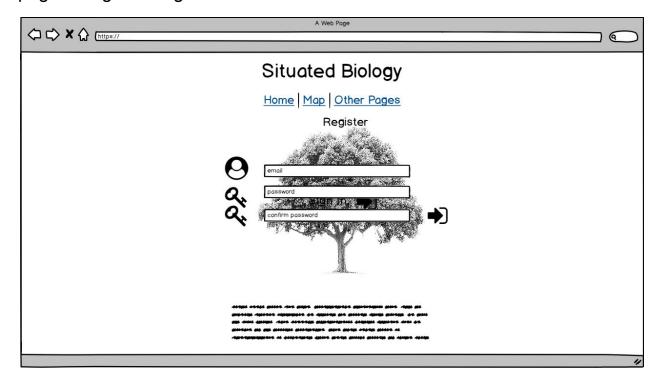
Login (Existing User)

Here the user's role (teacher/student) is identified based on the user name password credential pair and access is provided accordingly.



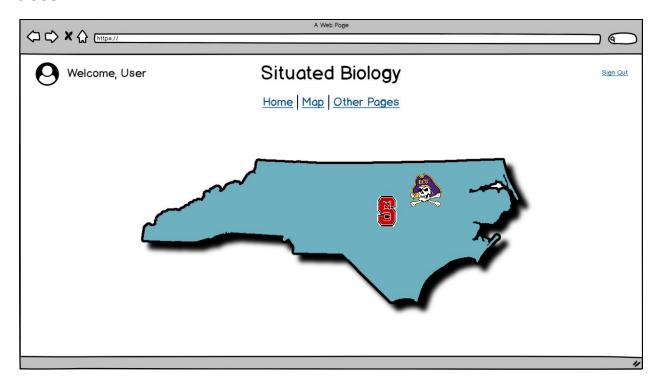
Registration (New User)

First time users can navigate to this page by clicking 'Register' in the login page to register to gain access.



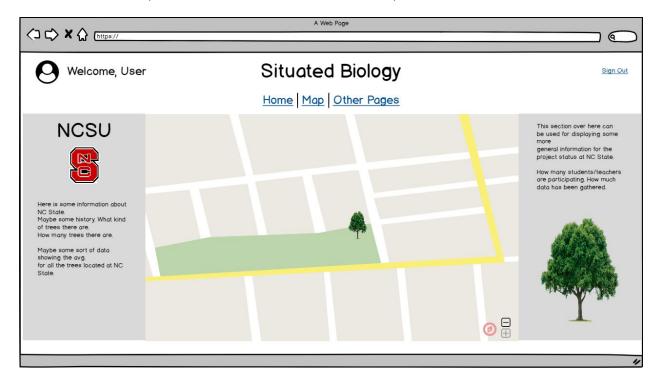
Region Map (Existing User)

Once logged into the website, the user is transitioned to the Map page. This page displays all of the schools involved in the website's project. A user can click on the icons to go to the school's campus map to view its trees.



NCSU Map (Existing user)

After clicking on a school's icon, they move to the campus map which allows the user to click on tree clusters within the campus. The left panel will give some brief information about the University and what type of trees, birds, and bacteria can be found there. The right panel will give a brief summary of the project status, including the number of contributors, the number of trees, the amount of data collected, etc.



Tree Cluster page

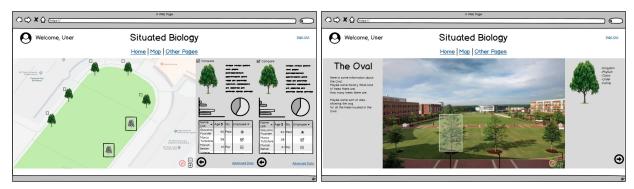
About

This page lets the user explore a predefined cluster of trees and explore them. They can navigate the cluster from the standard google maps view, or zoom in to a street view.

Central area

The user can toggle between the maps view and street view using the zoom in and out buttons. They can select the trees shown to bring up their information cards in the right hand container. The left container will display information about the tree cluster that is currently being viewed.





Comparison

Trees can be compared on this screen to see a side-by-side overview of their data.

Timeline & Reports page

About

The page where the logged in user will be able the study the ecosystem of a tree across various seasons with the help of timeline (slide) and by query desired reports.

Central area

The user first picks the tree from the map. Then the timeline window is loaded with the tree information. The user can slide to see the changes in the tree in an animated fashion across seasons. The magnifying glass can be used to access an interactive 3D Model of the tree.

This section also provides an upload button where the user can upload additional/updated data about the tree.



Left pane

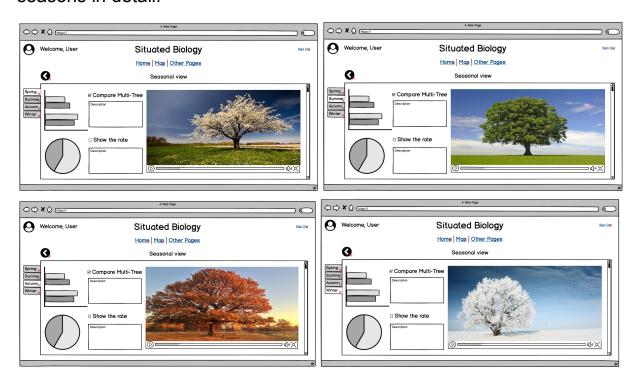
The user can view and generate additional seasonal data about the tree and can download the same.

Right pane

The user can view and generate additional ecosystem (bacteria, birds, etc) data about the tree and can download the same.

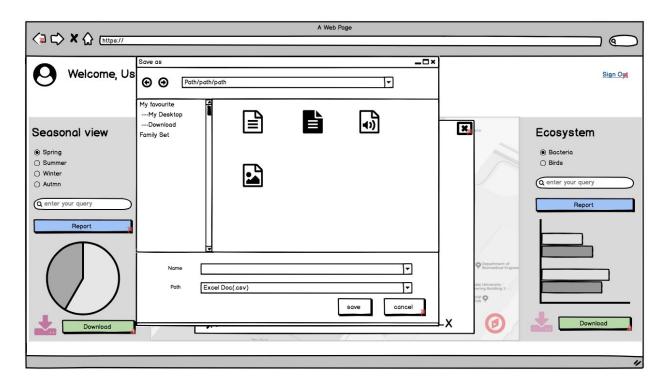
Seasonal view page

After click on the "Report" button in Timeline and Reports page, 3D model page, it can navigate to the seasonal view page, then users can go through the video record of tree growth, as well as see the report tree in different seasons in detail.



Download page

After click on the "Download" button in Timeline and Reports page, 3D model page, the download page will popup directly.



Live URL:

#option 1 : https://balsamiq.cloud/sdrehj5/pmuwy1o

Please hit the play button (top right)

(or)

#option 2 : Please login https://balsamiq.cloud/#login

We have added you.

Trial:

The problems we faced during the trial were:

- Finding the right images that conveys the required information and aligning the same in respective pages were quite cumbersome.
- Finding navigation widgets on a static Google Maps satellite screenshot is difficult due to the amount of visual noise. Therefore, we used the simpler Google Maps map.

- Prototyping 3D models is difficult, so just used 2D pictures to get the point across
- Navigating back was not possible, so back buttons were added.
- Map dragging is important in order to change the view and find more trees in the sight, however, map icon is a statistic image in balsamiq, so we just display several trees in the same window view.
- On the seasonal view page, displaying information vertically at first appeared cluttered. So, we moved to a horizontal styling.
- Finding the right sizing for side panels was more challenging than expected. We did not want to make the map feel claustrophobic, but we also wanted the side panels to convey enough information to be useful.