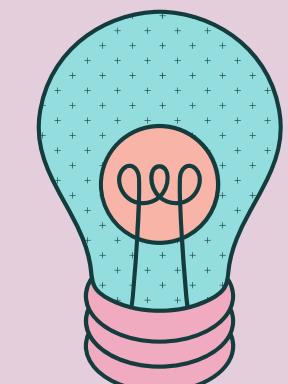


Chance Onyiorah

Throughout my time at the University of Florida, I was able to learn new skills both inside and outside the field of computer science. This portfolio showcases creative works from the last three years that I am especially proud of being a part of including work in web development, computer modeling, rapid prototyping, video editing and more!



Senior at University of Florida
Major: Computer Science
Minor: Engineering Innovation

CASTLE FINAL PROJECT

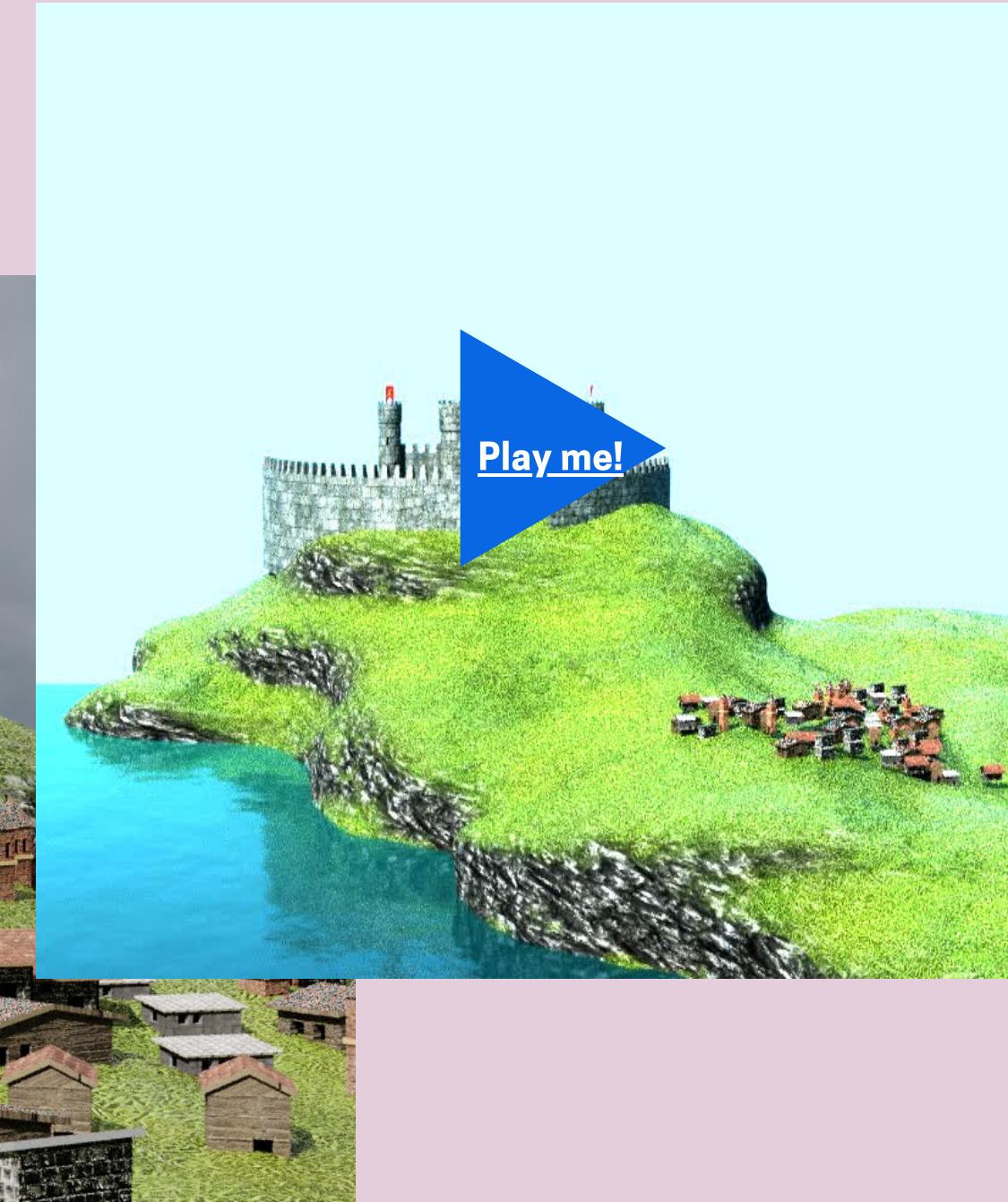


Date: Fall 2021

Class: Computer-Aided Modeling

Description: For our final partner project, we had to model a medieval setting featuring an indoor and outdoor scene using Blender software.

My Roles: For this project, I modeled and textured the castle structure, tables, chairs, tablecloths, food dishes, flowers, wine bottles and glasses for the inside dining room scene. I also assembled the full scene from both group members parts and added lighting to the inside scene.



HYDROTASK

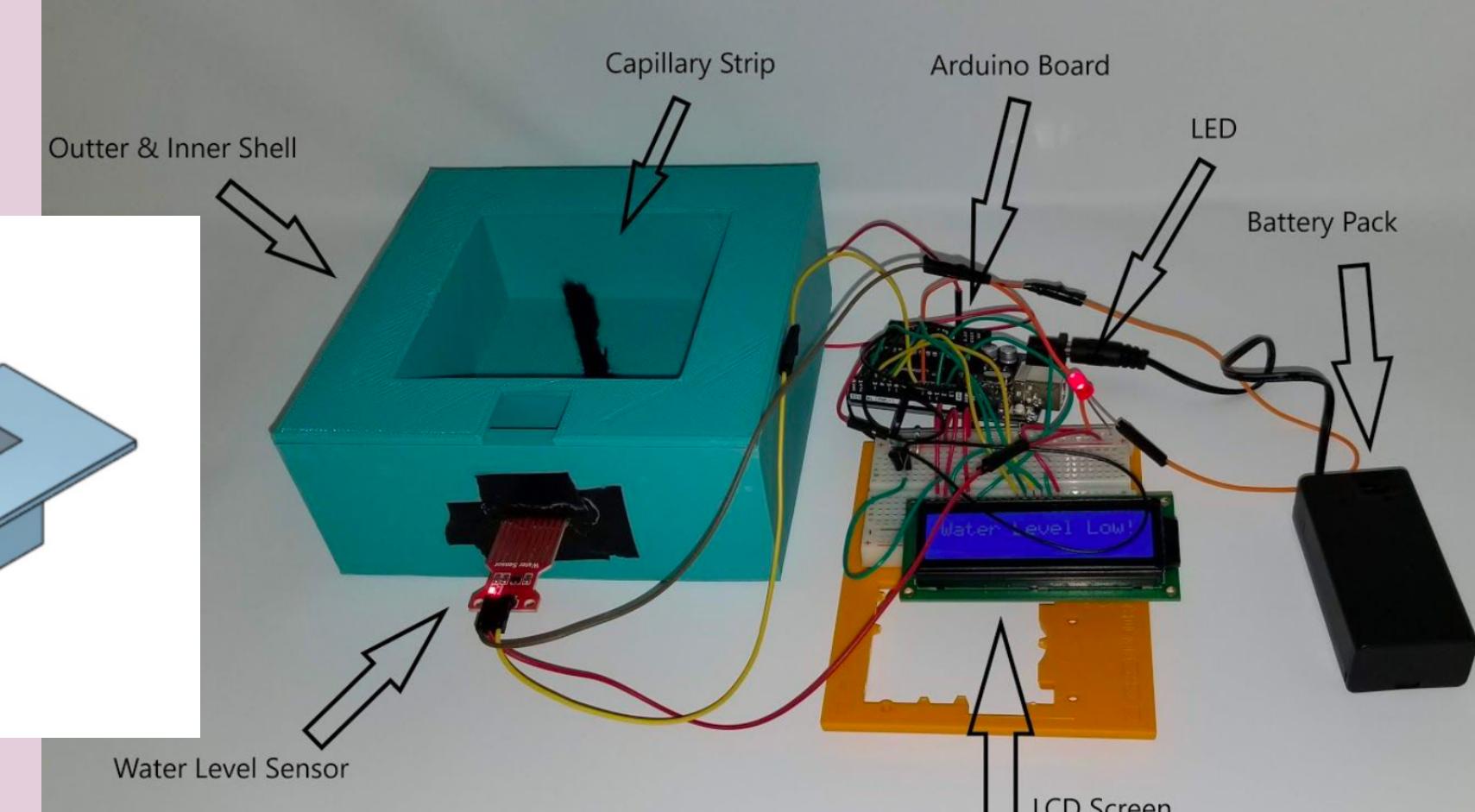
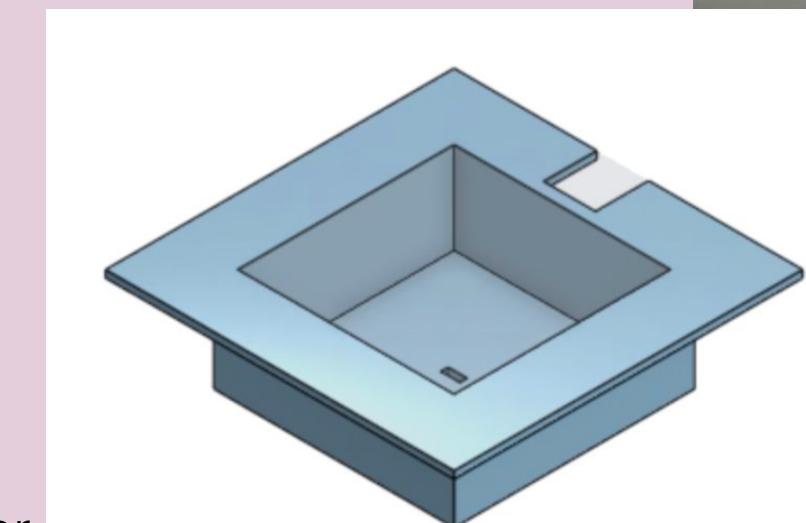
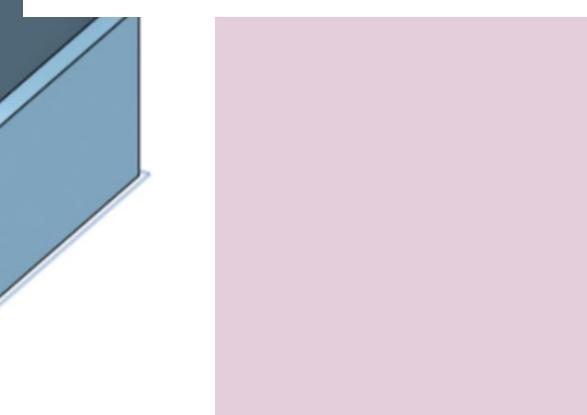
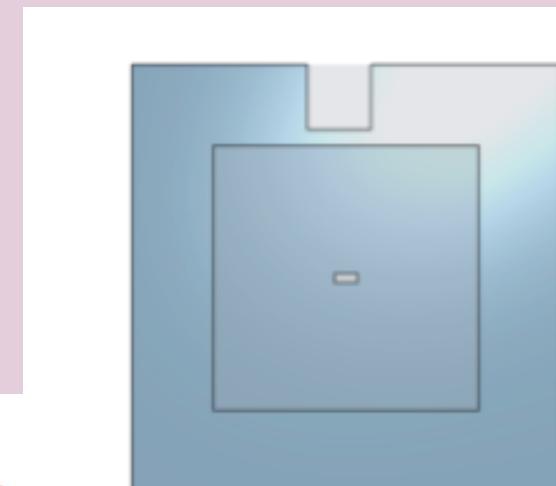
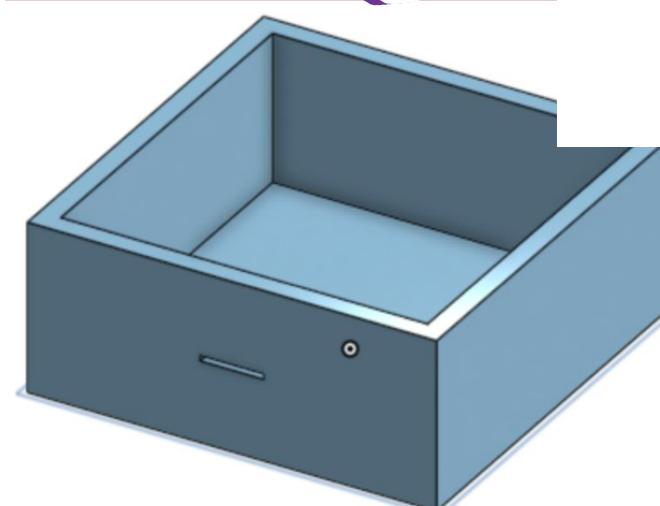
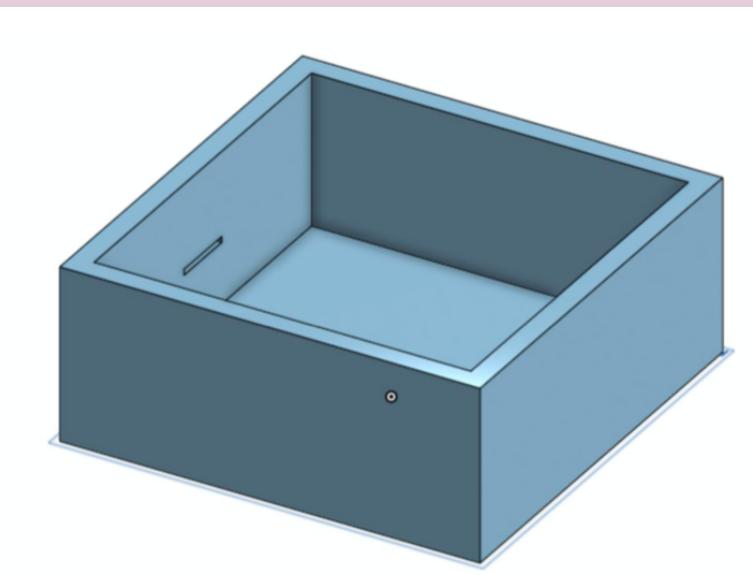
Date: Fall 2019

Class: Engineering Design and Society

Description: HydroTask was crafted for a group class assignment to create a self-watering planter based on our user's human-centered needs. We made use of OnShape for 3D-modeling and 3D-printing and an Arduino Uno for circuitry that detects when the water level in the planter is too low.

My Roles: I was tasked with 3D modeling and printing the square box for the planter as well as the coding and circuits for displaying information on the LCD.

[Click Here
to
View Report!](#)



LCD screen when there is enough water



LCD screen when there is not enough water



Capillary strip opening where soil would be in planter

VR COMMUNITY CENTER INFOMERCIAL

Date: Fall 2021

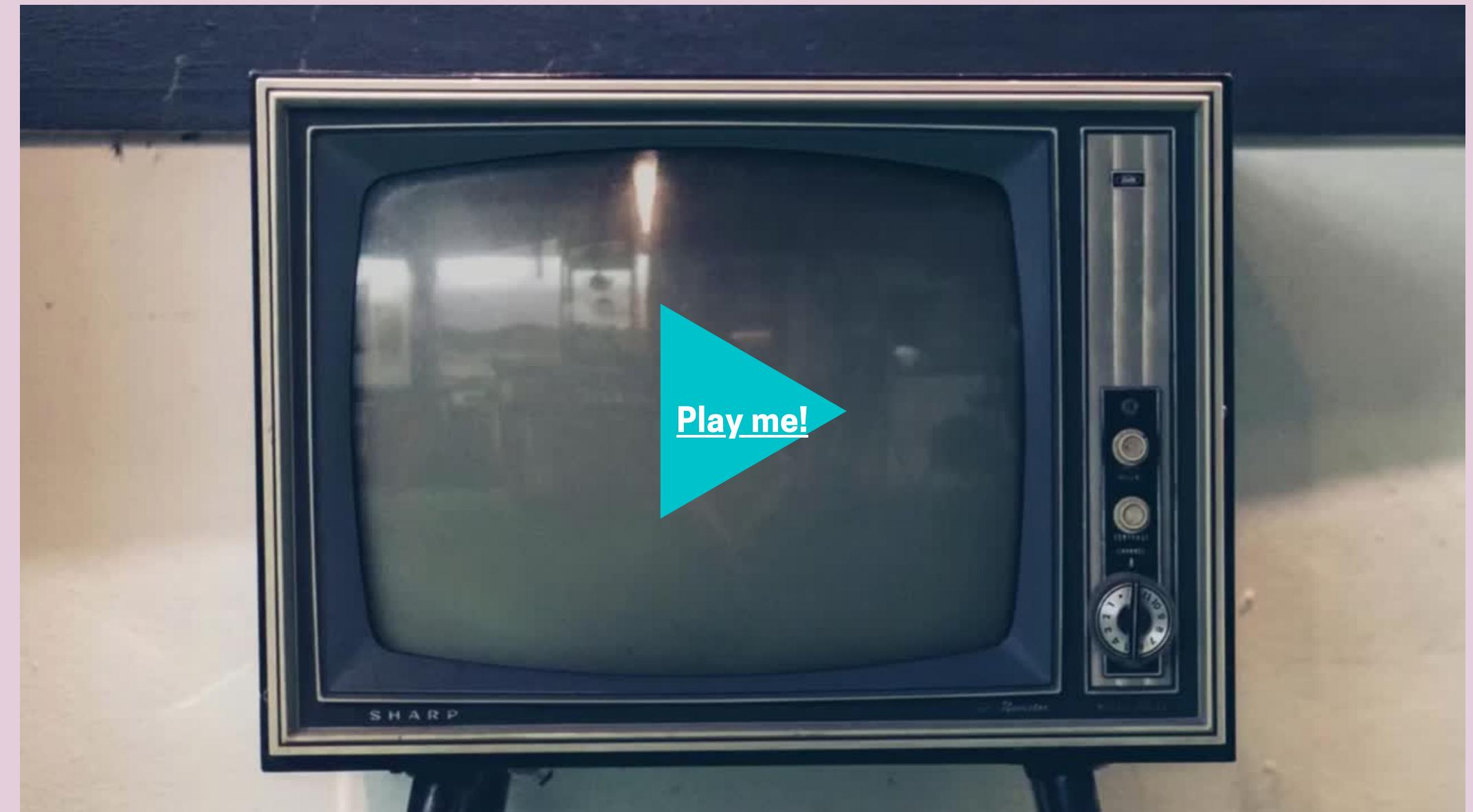
Class: Divergent Thinking

Description: After in-class brainstorming sessions, my group decided on a VR community center as a solution to the problem statement:

There are affordability and accessibility problems in using technology for elderly and children which also increases electric costs. How might we provide affordable and accessible technology to the elderly and children?

Our group filmed an infomercial to describe and advertise our solution.

My Roles: I helped with writing the script for the acting portions as well as edited the entire video to create an informative yet engaging presentation.



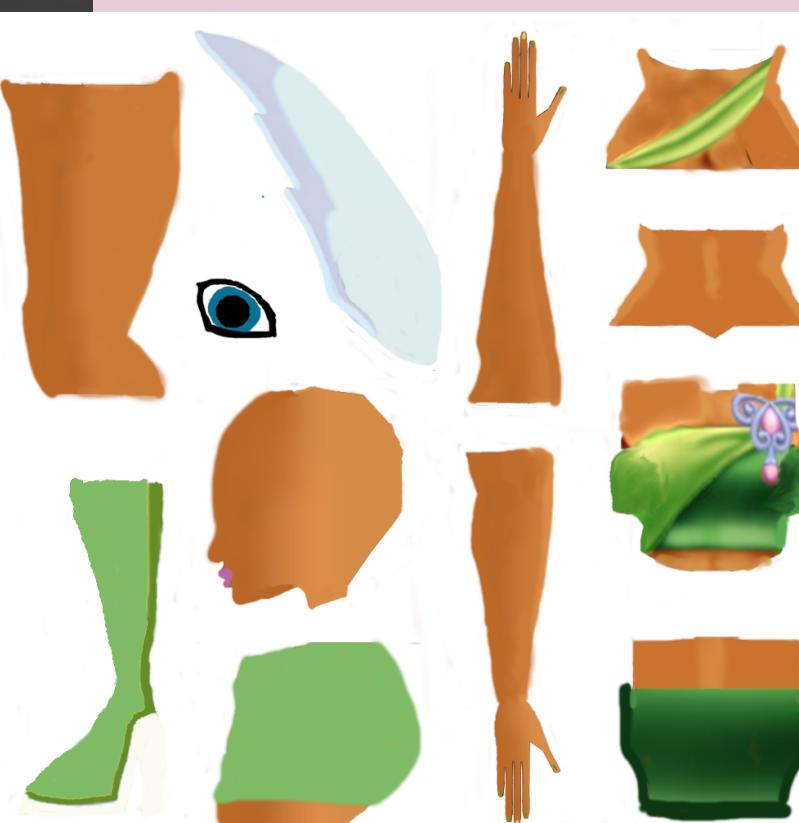
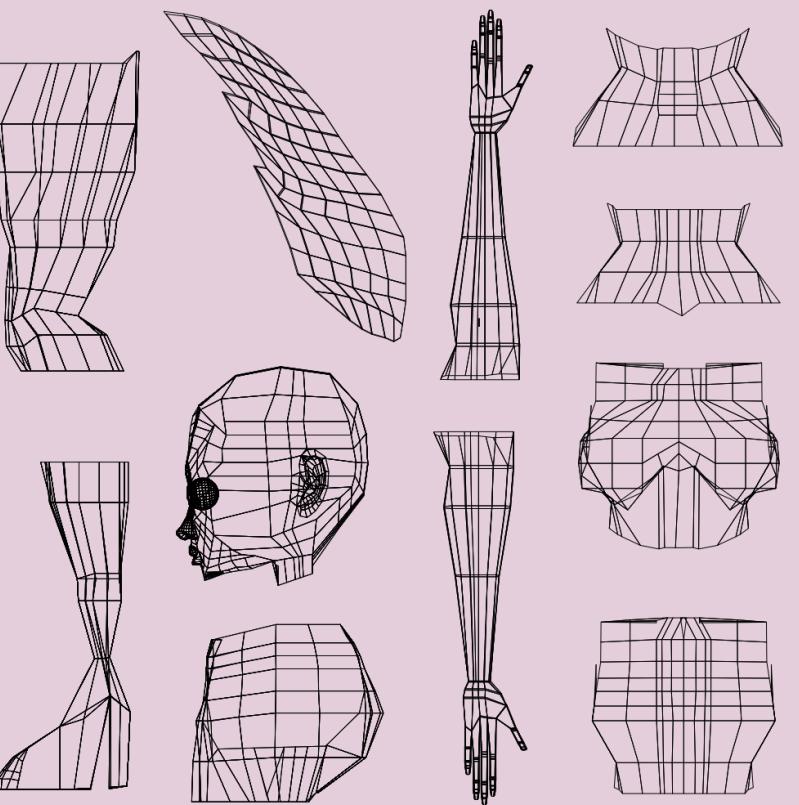
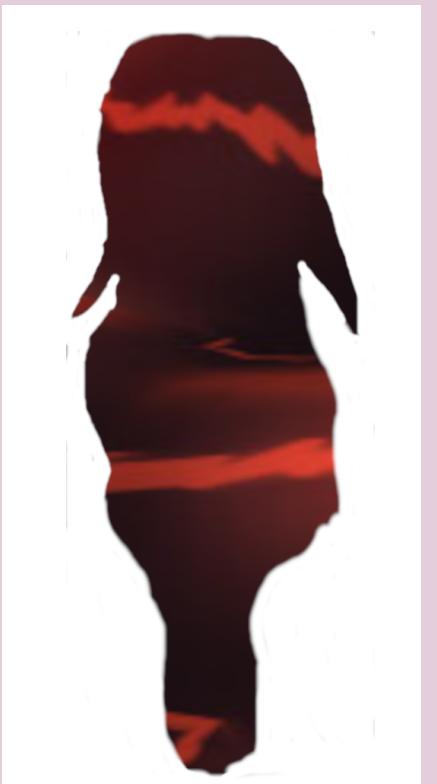
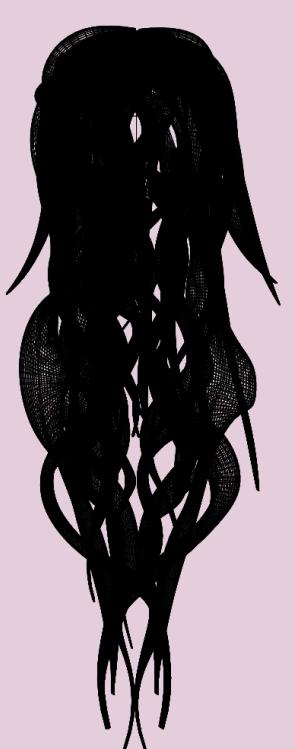
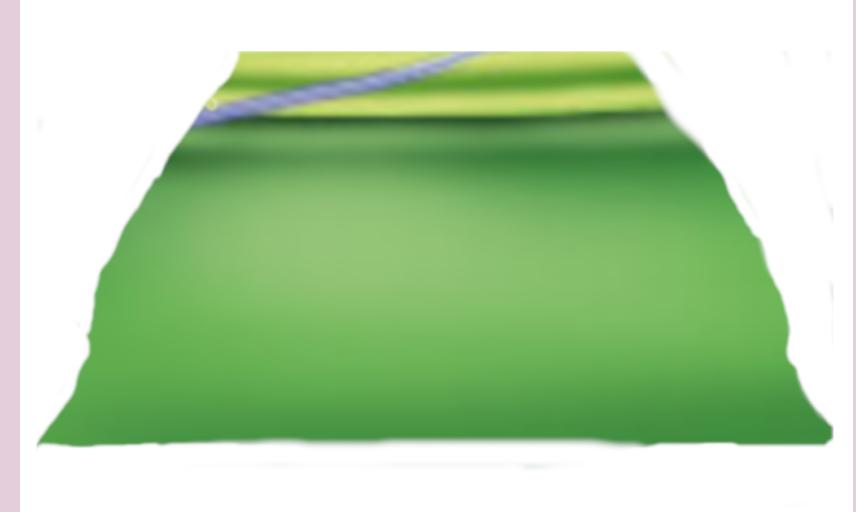
AISHA



Date: Fall 2021

Class: Computer-Aided Modeling

Description: The assignment was to model and texture a character of our choosing using Blender software. I made use of concepts learned in class such as shell and UV mapping to create Aisha, a fairy from the show *Winx Club*. I also utilized GIMP for editing the mapping images.

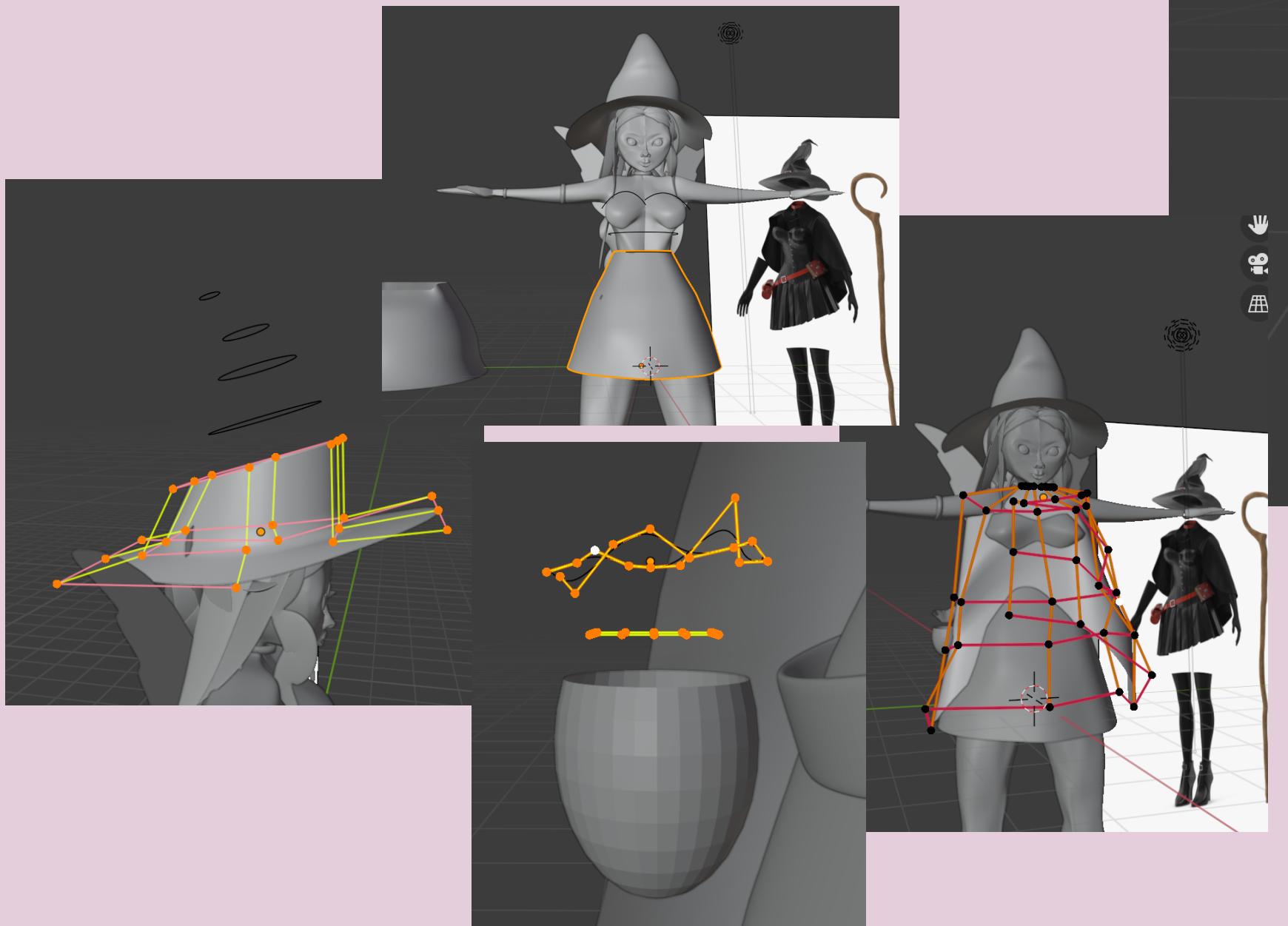


WITCH AISHA

Date: Fall 2021

Class: Computer-Aided Modeling

Description: An extension of the last project, my character has been invited to a Halloween party and needs a costume. I utilized Blender to dress Aisha as a witch. This was a practice of newly learned techniques of curve and NURBS modeling to create the cloth and organic material.



SWIS PROTOTYPE

Date: Fall 2021

Class: Integrated Product and Process Design (IPPD)

Description: As part of the UF IPPD program, my group is working with Raytheon Technologies to develop a modern, secure, and intuitive web portal using React.js and Springboot. Following the engineering processes to design, build, prototype, and test system designs under the guidance of faculty coaches and industrial liaison engineers, we coded a prototype of the web portal.

My Roles: I had the responsibility of coding the dashboard and FAQ pages as pictured as well as choosing colors and images for the design guidelines and moodboard.

The screenshot shows the SWIS Dashboard. At the top, there's a navigation bar with 'Atlas [SWIS]' and a search bar. Below it is a 'Dashboard' section with a heading 'Stay up to date with announcements about Atlas.' A 'What's New?' card displays recent updates: 'November 16, 2021 Announcement' (with a red notification badge), 'November 1, 2021 MS Word Patch' (with a blue badge), 'October 29, 2021 1080 Form' (with a green badge), and 'October 19, 2021 Did You Know?' (with a yellow badge). Below this is a calendar for November 2021. To the right are 'Quick Links' for 'Forms', 'Patches', 'How-Tos', 'Profile', and 'FAQ'. A 'Need Help?' section with a 'Contact the help desk' link is also present. At the bottom, a blue bar says 'Currently in User View. | Switch Back to Admin View'.

The screenshot shows the SWIS FAQ page. It features a sidebar with navigation links for Home, Forms, Patches, How-Tos, and FAQ. The main content area has a heading 'FAQ' and a sub-heading 'Get the answers to frequently asked questions.' A 'NEED MORE HELP?' section includes a 'Call the Help Desk' button and two time tables: 'Monday - Friday' (8am - 5pm EST) and 'Saturday - Sunday' (Closed). Below these are 'Submit Help Request Form' buttons. The main body contains several expandable FAQ items: 'Why was the SWIS portal changed to Atlas?', 'Where can I find a form?', 'What do I do if I don't know how to use a certain software?', 'How do I submit a form request?', 'How to switch to Admin View/User View?', 'Can I access the portal on Firefox?', 'I need the latest patch of Microsoft Word. Where can I find this?', 'How do I change my profile name?', 'As an admin, how do I see submitted form requests?', and 'Where do I access my quick links?'. Each item has a corresponding 'VIEW' button.

The moodboard displays the SWIS prototype's user interface. It includes a dashboard with a grid of cards, a login screen for 'ATHENA', a dark-themed dashboard with multiple windows, and a user profile page. To the right is a 'Colors' palette with sections for Primaries, Neutrals, and Other Shades, each with color swatches and hex codes.

| Color Name | Hex Code | Information |
|--------------|----------|---------------------------|
| Space Cadet | #2D3142 | Primary Dark |
| Independence | #4F5D75 | Secondary Dark |
| Crayola Blue | #45AEF2 | Accent |
| Neutral | #242424 | Neutral Dark, Text |
| Silver | #BFCOCO | Neutral Secondary |
| White | #FFFFFF | Primary Light, Background |

CARBONZERO



Date: Fall 2021

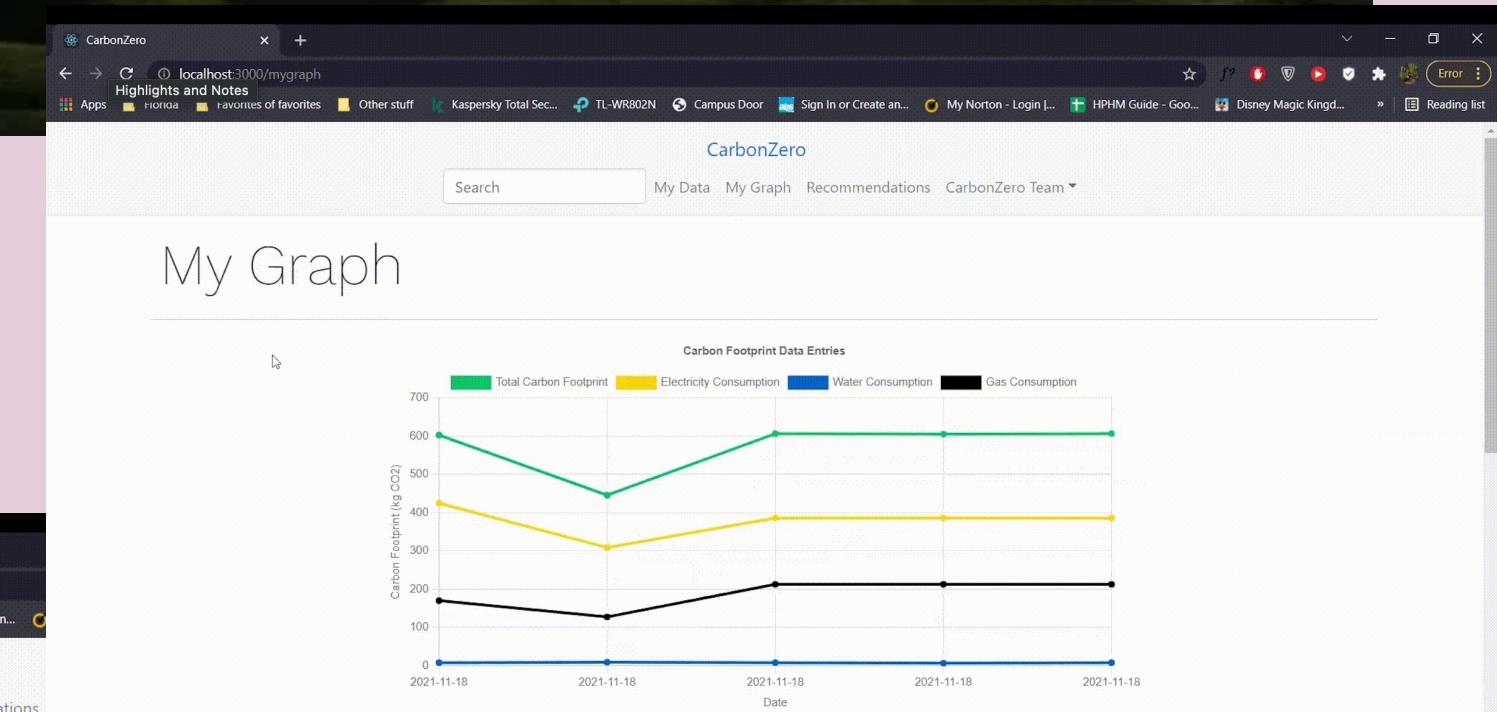
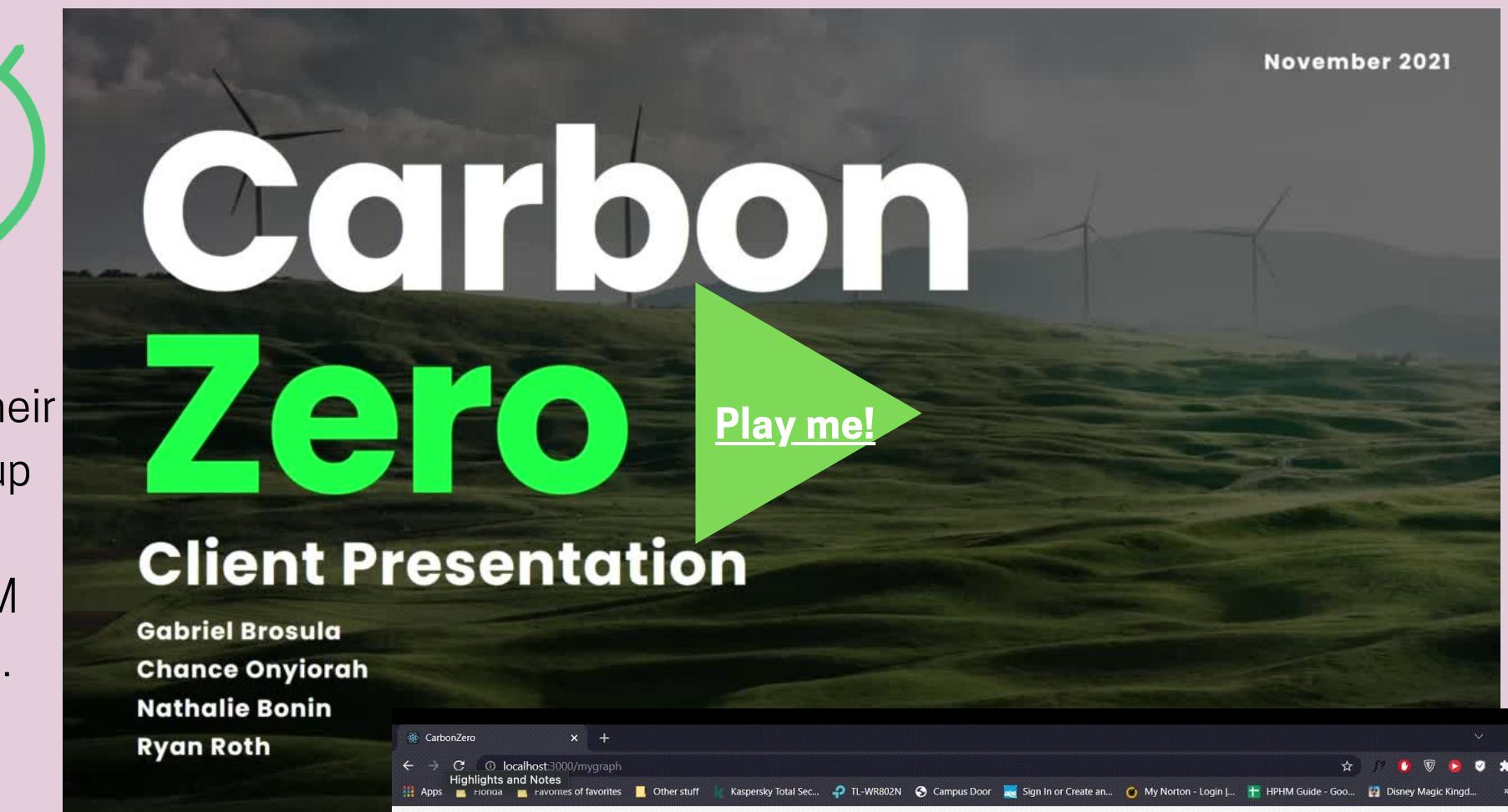
Class: Software Engineering

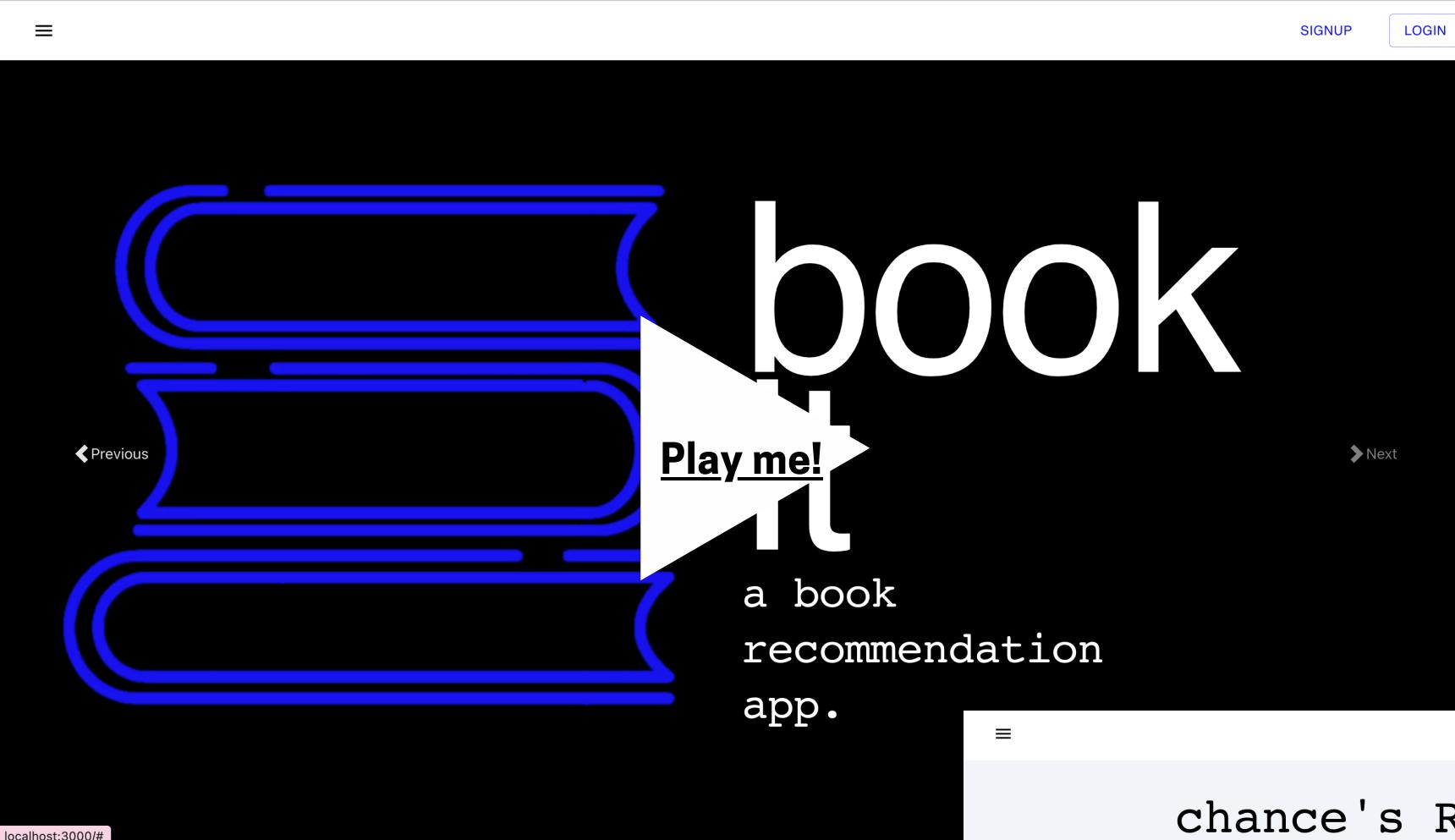
Description: CarbonZero is a web application that allows users to track their carbon footprint and receive tips on how to conserve energy. For this group project, we utilized React.js, Node.js, Express.js, and MongoDB to create a user system with associated carbon footprint user data. We also used IBM AI Watson service to create personalized recommendations for each user.

My Roles: Personally, I worked on setting up the Node and Express environment, the React app basic user interface with a landing page, both frontend and backend of the user system including login, signup, and logout functionality, setting up MongoDB database for user information and Cloudant database for AI component.

The screenshot shows a browser window titled "CarbonZero" with the URL "localhost:3000/login". The page has a header with a search bar and a "Login" button. Below the header is a "LOGIN" section containing two input fields: "Email address" with the value "carbonzeroteam@outlook.com" and "Password". A "SUBMIT" button is located at the bottom of the form. At the very bottom, there is a link "Don't have an account? [Sign Up Here](#)".

The screenshot shows a browser window titled "CarbonZero" with the URL "localhost:3000/recommendations". The page has a header with a search bar and navigation links for "My Data", "My Graph", and "Recommendations". The main content area is titled "Recommendations" and contains three sections: "Electricity Usage Recommendations", "Water Usage Recommendations", and "Gas Usage Recommendations". Under "Electricity Usage Recommendations", there are four items: "Turn off lights when they are not being used.", "Switch to LED lights! They are more energy-efficient.", "Unplug unused electronics! Plugged electronics can utilize power even when off.", and "Turn off the A/C when you are not home.".





localhost:3000/#



A screenshot of the user profile and recommendations section. It shows a search bar, a sidebar with "chance's Recommendations", and a grid of book cards. The first card is for "James and the Giant Peach" by Roald Dahl, the second for "Harry Potter and the Prisoner of Azkaban" by J.K. Rowling, and the third for "The Bluest Eye" by Toni Morrison. Each card includes a rating section with five blue hearts. At the bottom is a "New Recommendation" form with fields for Book Title, Author, Genre(s), Review, Rating (with one grey heart), and Upload image of book (Choose File).

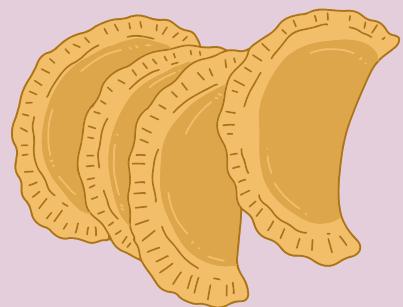
BOOKIT

Date: August 2020 - Present

Independent Project

Description: A book recommendation web application that allows the user to create and view book recommendations and add books to their reading lists utilizing React.js, Node.js, Express.js, MongoDB, MaterialUI, and Tailwind CSS to create a user system with associated recommendation user data.

TEACH ME



Date: Fall 2021

Class: Divergent Thinking

Description: A partner assignment was given to teach each other the process of doing something that we each do regularly. My partner and I decided to blend our two cultures together as she taught me how to make an Indian healing staple, turmeric milk, while I taught her how to make a vegetarian take on traditional Hispanic empanadas. We also created a video presentation that paints our experience with the viewers as restaurant patrons, complete with a menu and a look into the kitchen to see how the menu items are made.

My Roles: I was responsible for editing the last half of the video where I showed how my partner taught me how to make turmeric milk.

