

Team Project Phase 1
ECE 461L

Requirement 1-1 - Project Plan

Team Members:

Evan Rosenthal
Anvit Raju
Wyatt Cole
Julian Wearden
Saaketh Vanganti

Sprint Velocity:

Our team has thirty (30) work items defined to be completed by phase 2. Each work item should take 1-3 days. Our five (5) engineers will assume equal work distribution across the 6 weeks until phase 2 must be completed, giving us a sprint velocity of 5 tasks/week.

Collaboration Tools:


- GitHub for version/file management, bug tracking, and feature planning
- Discord for communication over text and voice
- Google Drive suite (docs, slides, etc) for non-code collaborative document editing/sharing


Implementation Methodology:


Our team will use the Agile development process to manage the project. Agile development will be useful since features are subject to change (i.e. they are not “locked in” as soon as they are done) meaning we will have continuous improvement along the way. Our sprint velocity will be at least one new feature per engineer completed by the end of the week (when programming actually starts, of course). In order to implement our project, we will use HTML/CSS and React.js to complete the front-end design of our site. The back-end will run on python and use the flask framework to process information and communicate with the front-end. The program will be deployed on the cloud using Heroku. Data such as user and project information will be stored on a MangoDB NoSQL database.


Requirement 1-2 - Features & Work Items


<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like the UI to be slick, clean, and easy to understand User Story	#29 opened 2 weeks ago by EvanRosenthal
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like an easy-to-digest method of seeing how much hardware is available to checkout User Story	#28 opened 2 weeks ago by EvanRosenthal
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like another user to access a project at the same time as me without there being conflicts User Story	#27 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like my password to follow NIST password requirement standards User Story	#26 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to be notified if my chosen project id conflicts with an existing project id User Story	#25 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like my userid to be unique User Story	#24 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to join multiple projects and select between which one to manage hardware for User Story	#23 opened 2 weeks ago by EvanRosenthal
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to have password confirmation User Story	#22 opened 2 weeks ago by wtc534
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like my account activity to persist between logins User Story	#21 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to be notified if I try to check out more hardware than is available User Story	#20 opened 2 weeks ago by EvanRosenthal
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to be able to log out of my account after I am done User Story	#19 opened 2 weeks ago by EvanRosenthal
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to be notified if I return more hardware than I checked out User Story	#18 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to have instructions on how to use the website User Story	#17 opened 2 weeks ago by AnvitRaju
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to return hardware that I previously checked out User Story	#16 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As an administrator, I would like to be able to modify the capacity of a particular hardware set User Story	#15 opened 2 weeks ago by EvanRosenthal
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to check out hardware from an available set User Story	#14 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	Enhance HTML/CSS skills for web development Research Item	#13 opened 2 weeks ago by AnvitRaju
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like my information to be encrypted and secure User Story	#11 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to be able to see how much inventory is currently available for each hardware set User Story	#10 opened 2 weeks ago by EvanRosenthal
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to login to an existing project User Story	#9 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to be able to create new projects User Story	#8 opened 2 weeks ago by Julian-Wearden-UT
<input type="checkbox"/>	<input checked="" type="radio"/>	As an administrator, I would like to be able to manually add/remove inventory from the storage system User Story	#7 opened 2 weeks ago by EvanRosenthal
<input type="checkbox"/>	<input checked="" type="radio"/>	As a user, I would like to sign in with user name, userid, and password User Story	#6 opened 2 weeks ago by Julian-Wearden-UT

☐  As a user, I would like to create a new user account User Story
#5 opened 2 weeks ago by Julian-Wearden-UT

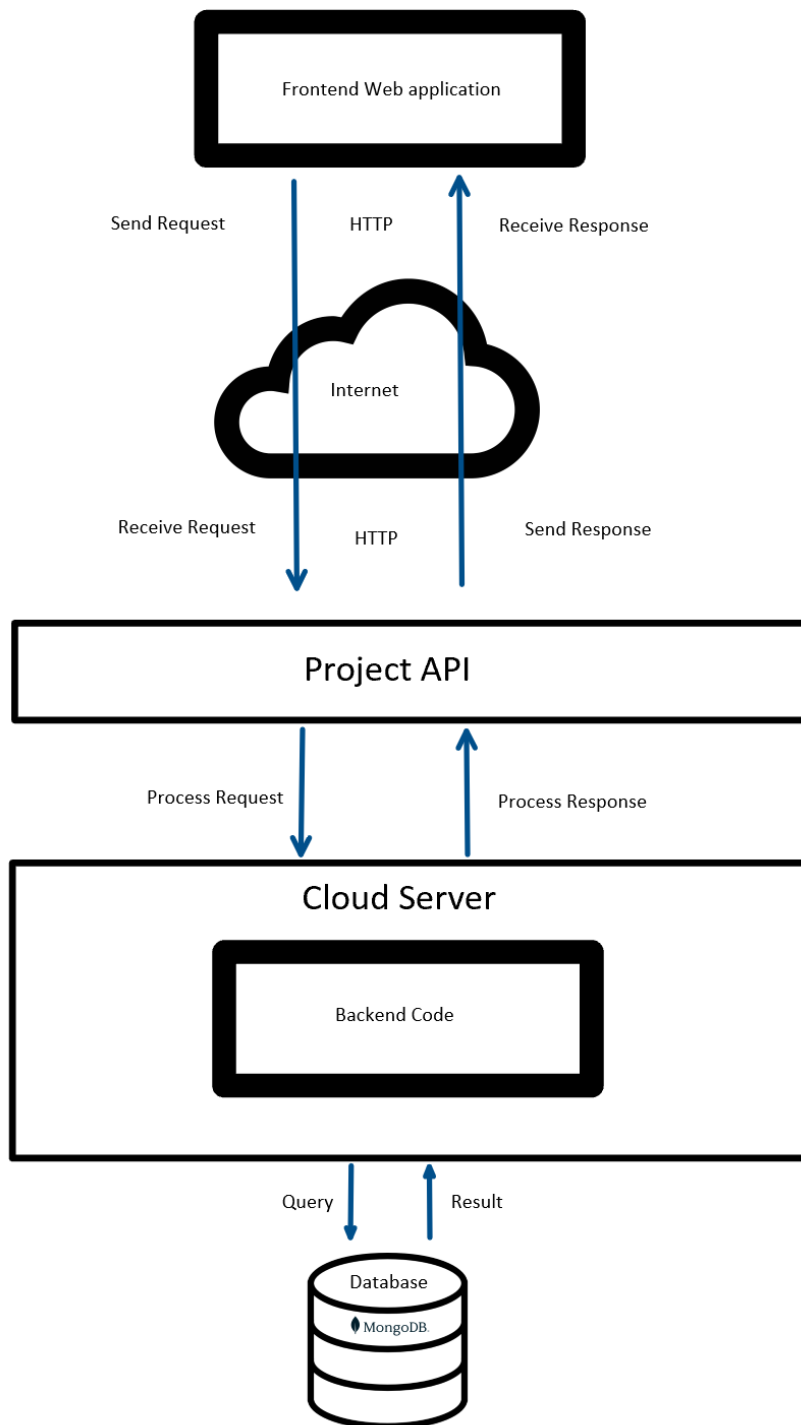
☐  Figure out how to host this website (Cloud AWS, something else?) Research Item
#4 opened 2 weeks ago by EvanRosenthal

☐  Learn/Enhance our Python Skills Research Item
#3 opened 2 weeks ago by EvanRosenthal

☐  Learn to use React for UI and Frontend design Research Item
#2 opened 2 weeks ago by EvanRosenthal

☐  Learn to use MongoDB for data storage Research Item
#1 opened 2 weeks ago by EvanRosenthal

Requirement 1-3 - High-Level Sketch



UI Mockups (DESIGN NOT FINAL: PROTOTYPES)

Existing User?
Log in here:

LOG IN

New User?
Sign up here:

REGISTER

Materials Checkout

90/100

Hardware W

90/100

Hardware X

90/100

Hardware Y

90/100

Hardware Z

Welcome, <User Name>

Projects you're a part of:

Project W

Project X

Project Y

Project Z

Create a new project:

CREATE

Join an existing project:

JOIN

All done? Make sure to

LOGOUT

90/100

Hardware W

90/100

Hardware X

90/100

Hardware Y

90/100

Hardware Z

Viewing <ProjectName>

All done? Make sure to

LOGOUT

Team Members:

<Username 1>

<Username 2>

<Username 3>

<Username 4>

Project Hardware:	Count:
Hardware W	##
Hardware X	##
Hardware Y	##
Hardware Z	##

Check out/Return Hardware:

Choose Hardware: ☐ Check Out

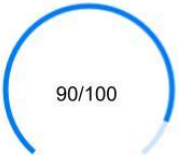
Hardware X ▼

☒ Return

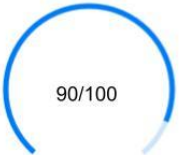
Amount:

Enter a number:

Do it!



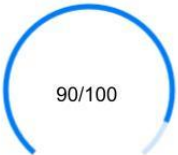
Hardware W



Hardware X



Hardware Y



Hardware Z