
User Manual

for

Edutale

Version 1.0 approved

Prepared by Cheyenne Ty, Abigail Penland, Tommy Le

Team Plasma

December 11, 2024

| | |
|--|-----------|
| 1. Introduction..... | 4 |
| 1.1 Purpose..... | 4 |
| 1.2 Scope..... | 4 |
| 1.3 Security..... | 4 |
| 2. Getting Started..... | 5 |
| 2.1 Overview..... | 5 |
| 2.2 Installing Visual Studio Code..... | 5 |
| 2.3 Installing Node.js..... | 5 |
| 2.4 Installing PostgreSQL and pgAdmin 4..... | 5 |
| 2.5 Downloading Edutale..... | 7 |
| 2.6 Setting up Edutale's Backend in pgAdmin 4..... | 8 |
| 2.7 Setting up Edutale's Frontend in Visual Studio Code..... | 10 |
| 3. Running Edutale..... | 13 |
| 4. Overview of Student Pages..... | 15 |
| 4.1 Welcome..... | 16 |
| 4.1.1 Page Layout..... | 16 |
| 4.1.2 Connect..... | 16 |
| 4.2 Mainpage..... | 17 |
| 4.2.1 Page Layout..... | 17 |
| 4.2.2 Profile..... | 17 |
| 4.2.3 Settings..... | 17 |
| 4.2.4 Admin..... | 17 |
| 4.2.5 Bookmarks..... | 18 |
| 4.2.6 Avatar..... | 18 |
| 4.2.7 Day Counter..... | 18 |
| 4.2.8 Skill Graph..... | 18 |
| 4.2.9 Ongoing Quests..... | 19 |
| 4.2.10 User Bar..... | 19 |
| 4.2.11 Quest Board..... | 19 |
| 4.2.12 Tutorial: Accepting a Quest on the Quest Board..... | 19 |
| 4.2.13 Tutorial: Completing a Quest in Ongoing Quests..... | 20 |
| 4.2.14 Tutorial: Quitting a Quest in Ongoing Quests..... | 20 |
| 4.3 Check-In..... | 20 |
| 4.3.1 Page Layout..... | 20 |
| 4.3.2 Statistics..... | 20 |
| 4.3.3 Schedule..... | 20 |
| 4.3.4 Check-In Form..... | 21 |
| 4.3.5 Tutorial: Changing Check-In Frequency..... | 21 |

| | |
|---|-----------|
| 4.3.6 Tutorial: Adding iCalendar File to Google Calendar..... | 21 |
| 4.3.7 Tutorial: Filling out a Check-In..... | 23 |
| 4.4 Inventory..... | 24 |
| 4.4.1 Page Layout..... | 24 |
| 4.4.2 Avatar..... | 24 |
| 4.4.3 Equipped Items..... | 24 |
| 4.4.4 User Bar..... | 24 |
| 4.4.5 Money..... | 24 |
| 4.4.6 Inventory List..... | 25 |
| 4.4.7 Tutorial: Buying an Item..... | 25 |
| 4.4.8 Tutorial: Equipping an Item..... | 25 |
| 4.5 Skill Gallery..... | 26 |
| 4.5.1 Page Layout..... | 26 |
| 4.5.2 Your Skills..... | 26 |
| 4.5.3 Quests..... | 26 |
| 4.5.4 Tutorial: Accepting a Quest in the Skill Gallery..... | 26 |
| 4.5.5 Tutorial: Completing a Quest in the Skill Gallery..... | 27 |
| 4.5.6 Tutorial: Quitting a Quest in the Skill Gallery..... | 27 |
| 4.6 Resume..... | 27 |
| 4.6.1 Page Layout..... | 27 |
| 4.6.2 Your Skills..... | 27 |
| 4.6.3 Your Projects..... | 28 |
| 4.6.4 Resume Skills Templates..... | 28 |
| 5. Overview of Admin Page..... | 29 |
| 5.1 Quests Tab..... | 29 |
| 5.2 Skills Tab..... | 31 |
| 5.3 Resources Tab..... | 32 |
| 5.4 Items Tab..... | 33 |
| 6. Disclaimers..... | 34 |
| 6.1 Nature of Prototype Build..... | 34 |
| 6.2 Known Issues..... | 35 |
| 6.3 Assets in Edutale..... | 35 |
| 6.4 Provided Quests and Resources..... | 35 |
| Appendix A: Used Assets..... | 36 |

1. Introduction

1.1 Purpose

The purpose of this document is to guide users in downloading, setting up, and using the Edutale application. Setup and installation guides have been tested for the Windows 10/11 operating systems only, and specific instructions assume that this is the operating system installed on the user's computer. Installation instructions, functionality, etc. may vary on other operating systems.

Supplemental videos may be present in certain sections as embeds to section titles. While these videos may be useful, they are not necessary in order to get the full scope of Edutale's usage. These videos are up-to-date when displaying the functionality of Edutale, but some visual elements may vary slightly due to the browser used.

1.2 Scope

The Edutale application allows Computer Science students to keep track of their progress in developing skills related to the job/career that they are pursuing. The student can state their ideal career, and the application will pull the top skills that are needed for those careers. Top skills will be added to the user's account, with a progress measurement associated with each skill. Progress will be measured based on the completion of different courses, certifications, projects, etc. that the application recommends to the user, which are internally called quests. A global progress bar in the form of a leveling system will also be present, and hitting certain level milestones awards the user equipment to customize their appearance. The application will support progress check-ins on a regular basis and allow users to see their current progress through quests. Ultimately, users will be able to include the skills they have built up in their resume.

The current state of Edutale is a prototype that fulfills most goals for the scope of the future application, with few exceptions. Rather than choosing any career, the prototype is limited to the career Computer Science. This was at the request of the client to ensure that development focused on reaching the educational objectives of Edutale with a game-like immersion. The prototype develops the framework for many careers to be added in the future.

1.3 Security

Currently, the Edutale application is hosted internally and all user data is saved to the user's computer. The authentication service used will record user email addresses as part of authentication, but these emails are not shared anywhere and are only accessible by the

Edutale developers. Resources listed for each quest have been vetted and deemed safe to utilize.

2. Getting Started

2.1 Overview

This section details instructions for downloading necessary prerequisites, the Edutale application, and building the application itself. These instructions should be done in order. You will need approximately 2GB of free storage on your computer for the Edutale application and all required software.

2.2 Installing Visual Studio Code

Visual Studio Code (VSC) is an integrated development environment (IDE) that allows for the Edutale application to be built and run.

- 1) Navigate to the Visual Studio Code website: <https://code.visualstudio.com/>
- 2) Click on the button that says “Download for Windows”. This should start downloading an installer file onto your computer.
- 3) After the download is complete, run the Visual Studio Code installer. Keep all default options.
- 4) Visual Studio Code is now installed onto your computer.

2.3 Installing Node.js

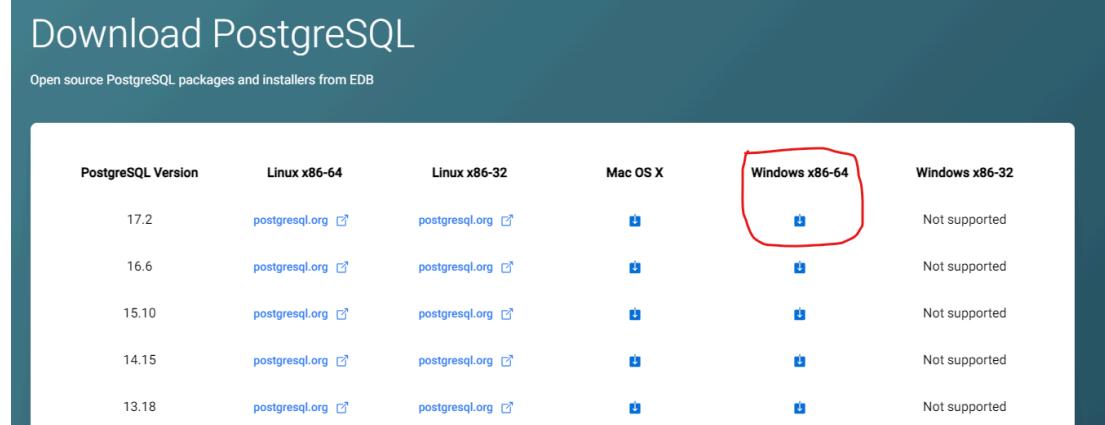
Node.js is a JavaScript runtime environment (JRE) that allows for web-based packages used by Edutale to render.

- 1) Navigate to the Node.js website: <https://nodejs.org/en>
- 2) Click on the button that says “Download Node.js (LTS)”. This should start downloading an installer file onto your computer.
- 3) After the download is complete, run the Node.js installer. Keep all default options.
- 4) Node.js is now installed onto your computer.

2.4 Installing PostgreSQL and pgAdmin 4

PostgreSQL and pgAdmin 4 are applications that store the backend of Edutale. PostgreSQL is the main software that stores the database, while pgAdmin 4 allows for the creation and maintenance of the database.

- 1) Navigate to the PostgreSQL installers page:
<https://www.enterprisedb.com/downloads/postgres-postgresql-downloads>
- 2) On this installers page, click on the download icon for PostgreSQL version 17.1 (or above). This should start downloading an installer file onto your computer.



The screenshot shows a table of PostgreSQL versions and their availability across different platforms. A red circle highlights the 'Windows x86-64' column for version 17.2, indicating it is the target download link.

| PostgreSQL Version | Linux x86-64 | Linux x86-32 | Mac OS X | Windows x86-64 | Windows x86-32 |
|--------------------|---|---|--------------------------|--------------------------|----------------|
| 17.2 | postgresql.org | postgresql.org | Download | Download | Not supported |
| 16.6 | postgresql.org | postgresql.org | Download | Download | Not supported |
| 15.10 | postgresql.org | postgresql.org | Download | Download | Not supported |
| 14.15 | postgresql.org | postgresql.org | Download | Download | Not supported |
| 13.18 | postgresql.org | postgresql.org | Download | Download | Not supported |

- 3) After the download is complete, run the PostgreSQL installer. Keep all default options selected.
 - a) When asked for a password, be sure to save this password somewhere convenient. This password will be used later when setting up the backend for Edutale. Although this password will only be used internally by the Edutale application, it is still recommended to use a strong password.
 - b) After setting a password, follow the rest of the PostgreSQL installation instructions with all default options selected.

- 4) After the installation is complete, uncheck the Stack Builder checkbox and then click on “Finish”.



- 5) PostgreSQL and pgAdmin 4 are now installed onto your computer.

2.5 Downloading Edutale

The Edutale files can be accessed through the Edutale Github repository:

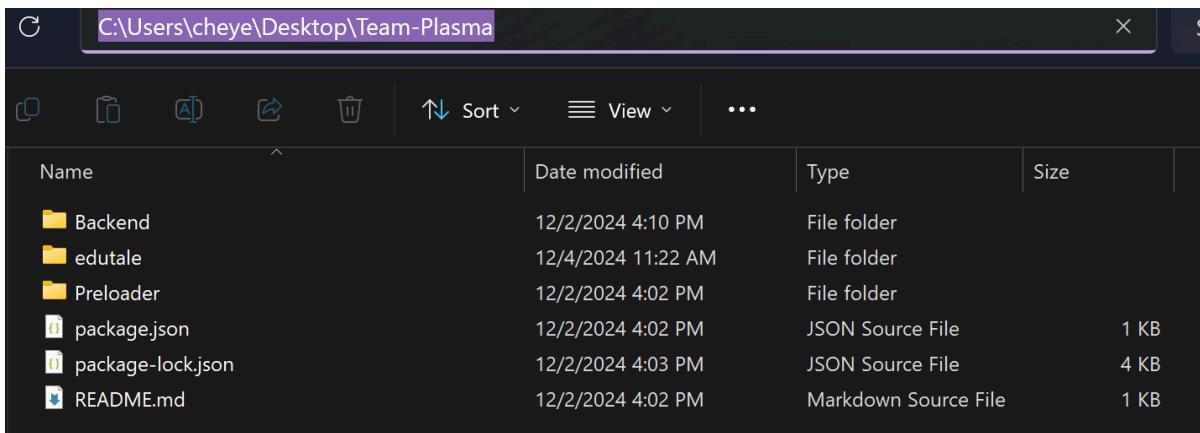
<https://github.com/Edutale/Team-Plasma>. You do not need to have a Github account nor Git installed to obtain these files. If you already have the ZIP file downloaded, please skip Steps 1-3 of this section.

- 1) Navigate to the Edutale Github repository: <https://github.com/Edutale/Team-Plasma>.
- 2) Click on the green “Code” button.
- 3) In the dropdown menu, click on “Download ZIP”.
- 4) After the ZIP file has been downloaded, navigate to your computer’s Downloads folder and unzip the file. Make sure that all unzipped files are within their own folder.

For future steps, the **root** of the project will be the path to the folder that has the following contents:

| Name | Date modified | Type | Size |
|-------------------|--------------------|----------------------|------|
| Backend | 12/2/2024 4:10 PM | File folder | |
| edutale | 12/4/2024 11:22 AM | File folder | |
| Preloader | 12/2/2024 4:02 PM | File folder | |
| package.json | 12/2/2024 4:02 PM | JSON Source File | 1 KB |
| package-lock.json | 12/2/2024 4:03 PM | JSON Source File | 4 KB |
| README.md | 12/2/2024 4:02 PM | Markdown Source File | 1 KB |

Since this root path will be different for every user, we recommend saving the root path somewhere convenient. For example, the highlighted portion of the following image would be the **root** path for an example user, since they see the correct contents:



| Name | Date modified | Type | Size |
|-------------------|--------------------|----------------------|------|
| Backend | 12/2/2024 4:10 PM | File folder | |
| edutale | 12/4/2024 11:22 AM | File folder | |
| Preloader | 12/2/2024 4:02 PM | File folder | |
| package.json | 12/2/2024 4:02 PM | JSON Source File | 1 KB |
| package-lock.json | 12/2/2024 4:03 PM | JSON Source File | 4 KB |
| README.md | 12/2/2024 4:02 PM | Markdown Source File | 1 KB |

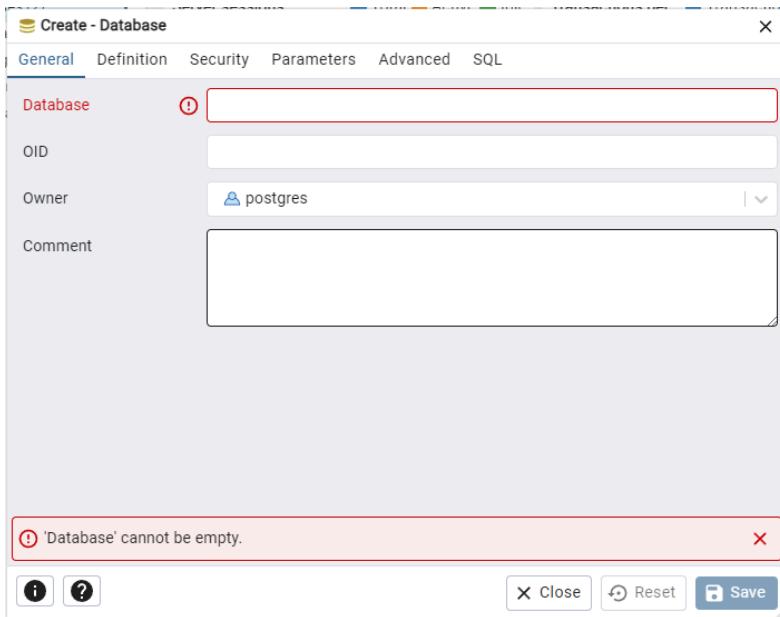
When extracting the ZIP file for the project, the folder containing all the project files may be called Team-Plasma or Team-Plasma-main. Either name is appropriate, and no setup/installation steps will differ between the two names.

2.6 Setting up Edutale's Backend in pgAdmin 4

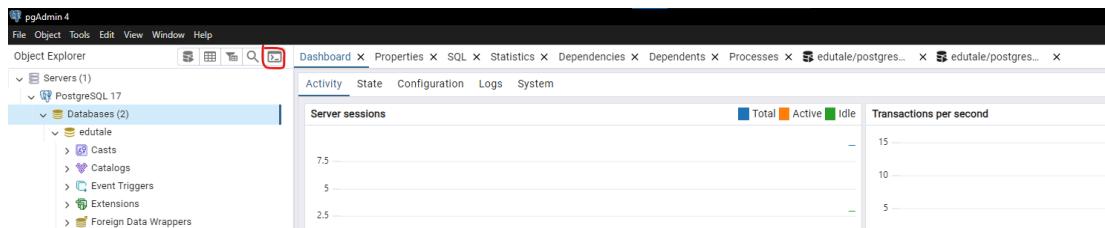
Some Edutale files need to be run within pgAdmin 4 to create the database for the application.

- 1) Open the pgAdmin 4 application on your computer.
- 2) Upon opening, you will be asked to set a master password for pgAdmin. After entering your password, click on the blue “✓ Ok” button.
 - a) This is necessary to secure and unlock other credentials used within the application. Be sure to save this password somewhere convenient. Although this password will only be used internally by the Edutale application, it is still recommended to use a strong password.
- 3) In the left side of the application, you will see a dropdown menu arrow followed by the header “Servers”. Click on the dropdown arrow.

- 4) You will then be asked to enter the password to connect to the PostgreSQL server. Enter the same password and then click on the blue “✓ Ok” button.
- 5) Click on the dropdown menu followed by the header “PostgreSQL 17” (17 could be changed to whatever version number was installed on the device).
- 6) Right click on the header “Databases”.
- 7) This will popup a new menu. From this, click on the option “Create”. An additional popup will appear. From this, click on the option “Database...”.
- 8) You will be presented with many options to create your database. For the Edutale application, you will only need to input the database name in the input box highlighted red (pictured below). Input the word “edutale”, all lowercase and without the quotations. Then, click on the blue “Save” button.



- 9) There should now be a subheader called “edutale” under the “Databases” header. Click on the “edutale” header on the left sidebar.
- 10) In the top left of the menus, click on the PSQL Tool (circled in red below). A command-line interface should be displayed on the right side of the application.



- 11) At the top-level folder of the project, At the prompt line `edutale=#`, type in the following command:

```
\i root/Backend/src/config/main.sql;
```

Below is an example of what this command can look like. On this machine, the **root** path is `C:/Users/cheye/Desktop/Team-Plasma`. Ensure that all slashes in

the file path are forward slashes; the beginning \i should be the only place that has a backslash.

```
\i C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/main.sql;
```

- a) Note: If this is the first time you are setting up the Edutale database, you may see an error that looks similar to the following:

```
edutale=# \i C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/main.sql;
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:3: ERROR:  table "student_skill" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:4: ERROR:  table "student_progress" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:5: ERROR:  table "career_skill" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:6: ERROR:  table "student_quest" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:7: ERROR:  table "skill_quest" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:8: ERROR:  table "quest_resources" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:9: ERROR:  table "student_inventory" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:10: ERROR: table "student_career" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:11: ERROR: table "student" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:12: ERROR: table "skill" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:13: ERROR: table "career" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:14: ERROR: table "quest" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:15: ERROR: table "resources" does not exist
psql:C:/Users/cheye/Desktop/Team-Plasma/Backend/src/config/drop.sql:16: ERROR: table "inventory" does not exist
```

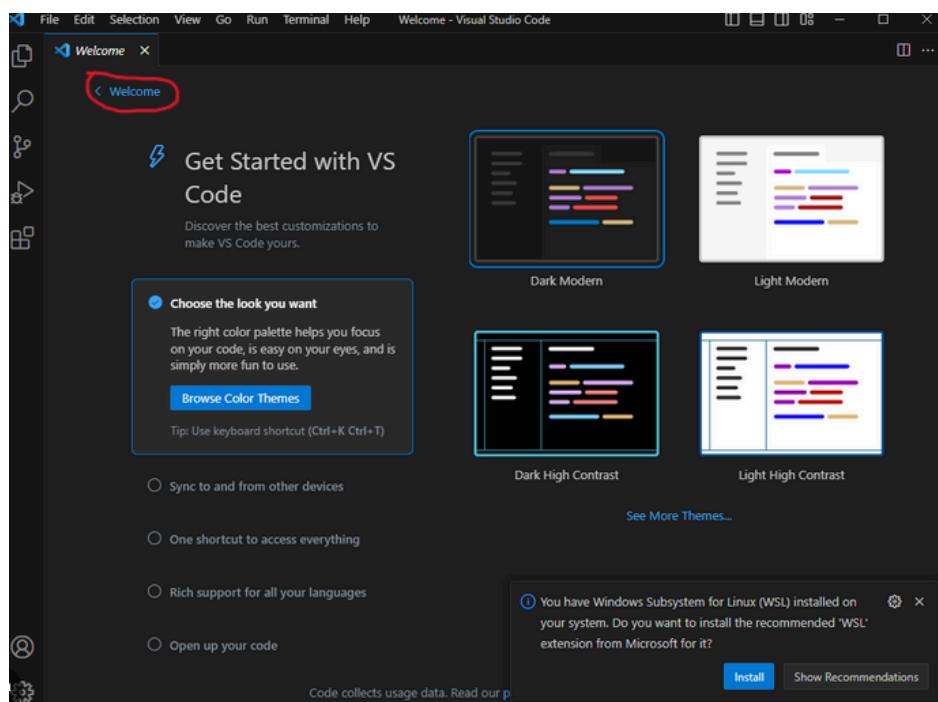
These error messages are normal, and only appear because this is the first time the Edutale database is being set up. You can safely disregard these messages. If the main.sql file is run again in the future, these error messages will no longer appear.

2.7 Setting up Edutale's Frontend in Visual Studio Code

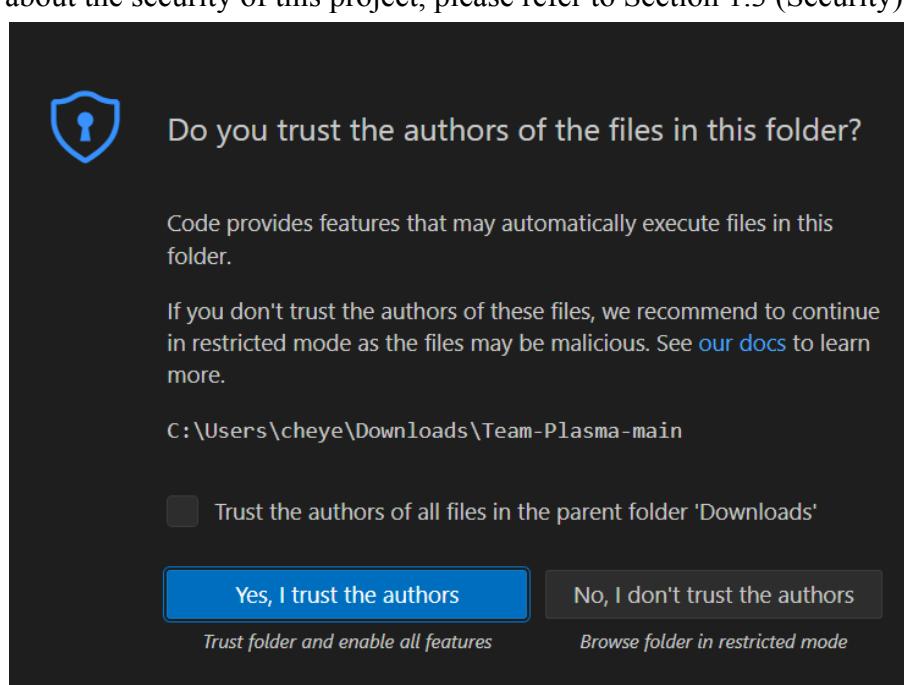
In order to set up the frontend of Edutale, we will use the terminal within Visual Studio Code. We will also set up a crucial file in order to allow the frontend of Edutale to communicate with the backend database we set up in Section 2.6 (Setting up Edutale's Backend in pgAdmin 4).

- 1) Open Visual Studio Code.
- 2) At the center of the screen, click on the “Open Folder...” option. This should bring up your file explorer.
 - a) If the “Open Folder...” button is not at the center of the screen, look at the top left corner for a “< Welcome” button. If you can see this button, click it to go

back to the Welcome screen.



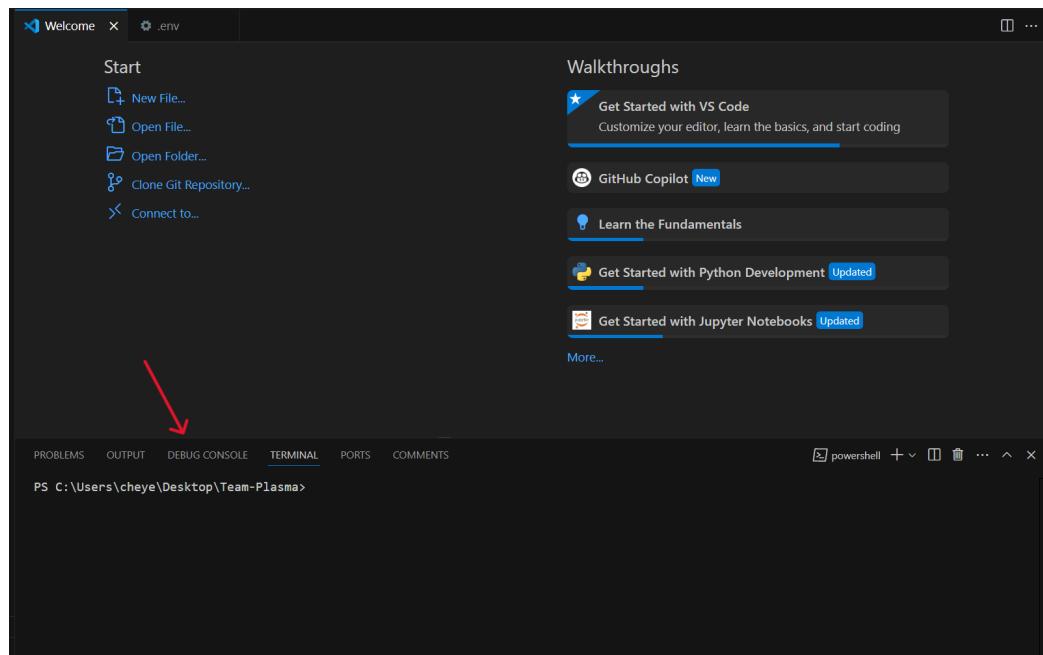
- 3) Find and click on your **root** folder which is where you extracted the ZIP file to. This would be named either Team-Plasma or Team-Plasma-main. VSC should then open up a menu on the left side of the screen that displays all of the folders and files seen within the **root** folder.
 - a) VSC may ask you if you trust the files in the opened folder. If prompted, click “Yes, I trust the authors”, but leave the checkbox empty. If you are concerned about the security of this project, please refer to Section 1.3 (Security).



- 4) Open the “Backend” folder. While this folder is selected, click on the “New File” button to create a new file in the “Backend” folder. Name this file .env.
- 5) Enter the following inside of the .env file. For the value for DB_PASSWORD=, put the master password you created in Section 2.6 (Setting up Edutale’s Backend in pgAdmin 4).

```
Backend > .env
1 DB_USER=postgres
2 DB_HOST=localhost
3 DB_NAME=edutale
4 DB_PASSWORD=
5 DB_PORT=5432
6
7 PORT=3000
```

- 6) At the bottom of the VSC window, there should be a Terminal tab. If this is not on your screen, press Ctrl + ` to bring up the Terminal (the ` button is often located directly above the Tab button on a keyboard).



- 7) Essential Node.js packages must be installed in order to successfully set up Edutale. To do this, specific commands must be run within the terminal. To install these packages, enter the following commands in the order that they are listed. Be sure to enter the next command when you are *sure* the current command has finished; you will know when you can enter the next command when PS **root>** appears again in the terminal.

- a) cd Backend

- b) npm install
- c) cd ../edutale
- d) npm install
- e) cd ../
- f) npm install

At any point while installing the packages, if vulnerabilities are found please run the following command to fix the vulnerabilities:

```
npm audit fix
```

Below is an example of this message. You can continue with the steps above as normal.

```
PS C:\Users\cheye\Desktop\Team-Plasma-main\edutale> npm install

added 331 packages, and audited 332 packages in 9s
112 packages are looking for funding
  run `npm fund` for details

3 vulnerabilities (2 low, 1 high)

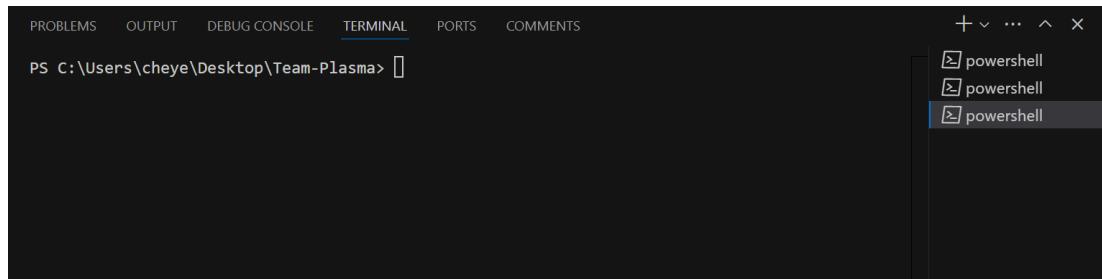
To address all issues, run:
  npm audit fix
Run `npm audit` for details.
```

3. Running Edutale

This section details the steps done to run the Edutale application on your machine. Ensure that you have followed all of the instructions in Section 2 (Getting Started) before attempting to run Edutale. Any time you want to run Edutale again, you must complete all of the following steps again.

- 1) Open Visual Studio Code.
- 2) On the center of the screen, click on the “Open Folder...” option. This should bring up your file explorer.
- 3) Find and click on your **root** folder. VSC should then open up a menu on the left side of the screen that displays all of the folders and files seen within the **root** folder.
- 4) If there is not one already, open a Terminal at the bottom of the VSC window by pressing **Ctrl + `**.
- 5) At the right side of the Terminal window, there should be a “+” button. This button opens more Terminal tabs. Click the “+” button until there are a total of three tabs.

The Terminal tab should now look similar to the following:

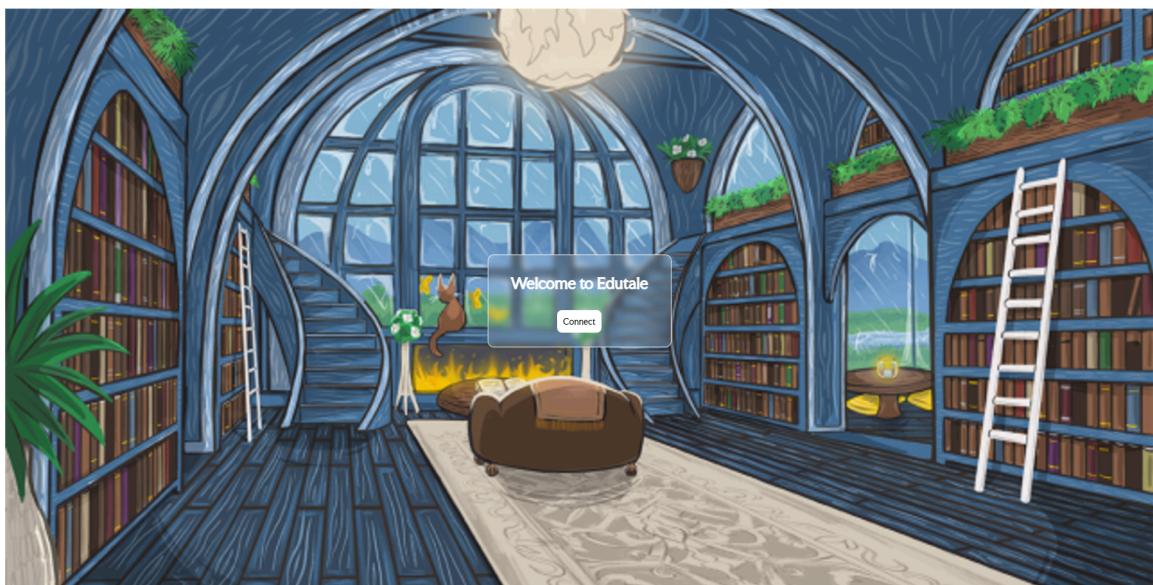
A screenshot of the Visual Studio Code interface. At the top, there is a navigation bar with tabs: PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL (which is underlined), PORTS, and COMMENTS. Below the navigation bar, there is a terminal window with the path 'PS C:\Users\cheye\Desktop\Team-Plasma>'. To the right of the terminal, there is a sidebar with three entries: 'powershell', 'powershell', and 'powershell', with the third one being the active tab.

- 6) Now, you must enter a set of commands for *each* terminal. It is okay to change the order in which each terminal is set up, but the instructions within *each* terminal must be followed in the order that they appear.
 - a) First terminal:

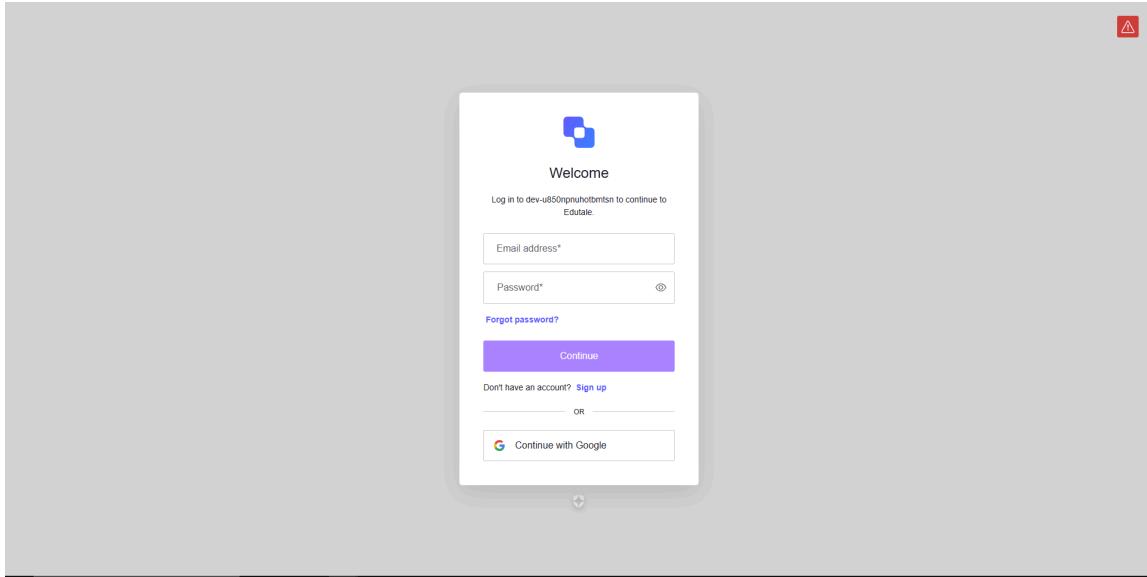
```
cd Backend
npm run dev
```
 - b) Second terminal:

```
cd edutale
npm run dev
```
 - c) Third terminal:

```
cd edutale
npx http-server --cors
```
- 7) After all three terminal windows are set up, you can now access the Edutale application using a web browser of your choice. Within your web browser's address bar, type in <http://localhost:5173> and press enter.
- 8) If all steps have been successfully completed, you should now see the Welcome page:



- 9) Click on “Connect”. You will be brought to the screen pictured below. We recommend using the “Continue with Google” option.



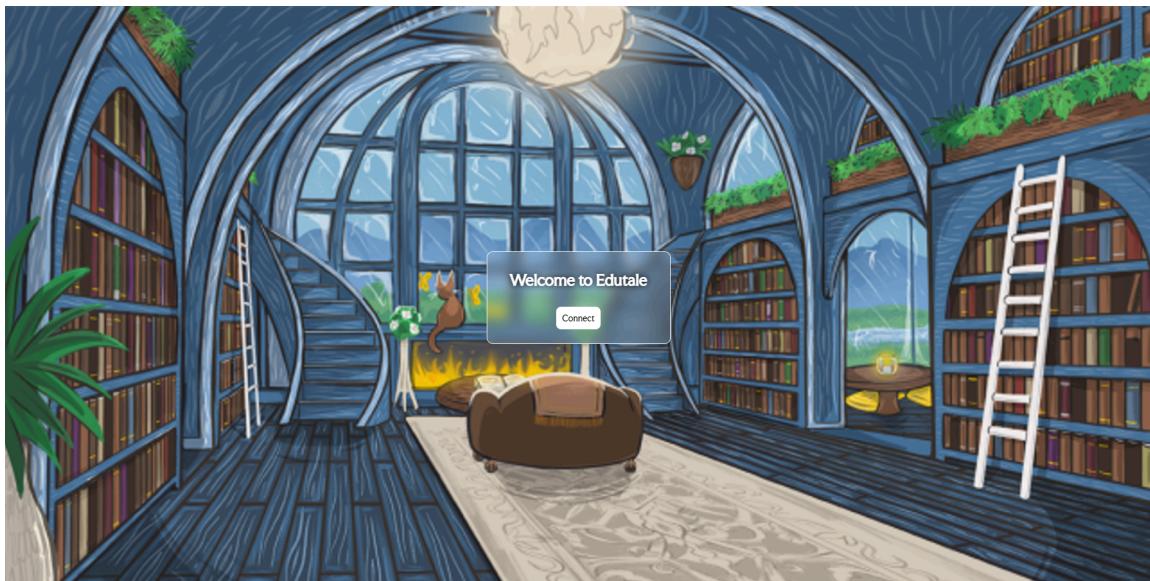
- a) Note: If you have run Edutale before, you may already be logged in. In this case, you will see the Mainpage instead.
- 10) After authenticating, you should now see the Mainpage of Edutale, similar to what is seen below. This means that Edutale has been successfully run.

4. Overview of Student Pages

This section details the layout of the pages accessible to students, as well as the different functions students can do on each page. These pages are accessible to all users.

4.1 Welcome

4.1.1 Page Layout

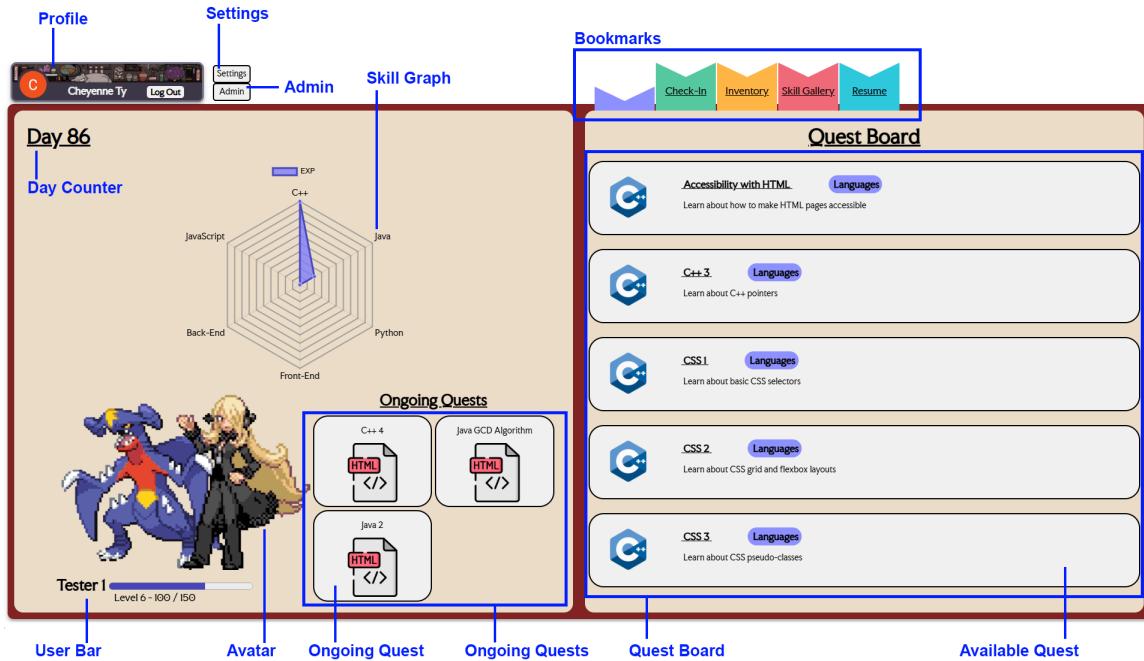


4.1.2 Connect

This button is used to log in to the Edutale application. We recommend using the “Continue with Google” option when connecting.

4.2 Mainpage

4.2.1 Page Layout



4.2.2 Profile

The profile banner displays your name and profile picture. This banner also displays the “Log Out” button, which can be used to log out of your account and return to the Edutale Welcome page. This profile banner will appear across all student pages, with the exception of the Settings page.

4.2.3 Settings

This button takes you to the Settings page, which contains account and application options. In the current prototype, this button only shows placeholder text. However, in future releases of Edutale the Settings page will display options to change the appearance of the application or to change user settings. For more information, see Section 6.1 (Nature of Prototype Build). This button will appear across all student pages.

4.2.4 Admin

The Admin button takes you to the Admin page, which contains all of the functions necessary to add, delete, and modify the quests, skills, resources, etc. within Edutale. In the current prototype, this button is accessible by any user. However, in future releases of

Edutale this button (and page) can only be accessed by administrators. For more information, see Section 6.1 (Nature of Prototype Build).

4.2.5 Bookmarks

The bookmarks are the main navigation buttons that switch the page to different parts of the Edutale application. The current page's bookmark will be lowered to signify that it is currently selected. These bookmarks appear across all student pages, with the exception of the Settings page.

4.2.6 Avatar

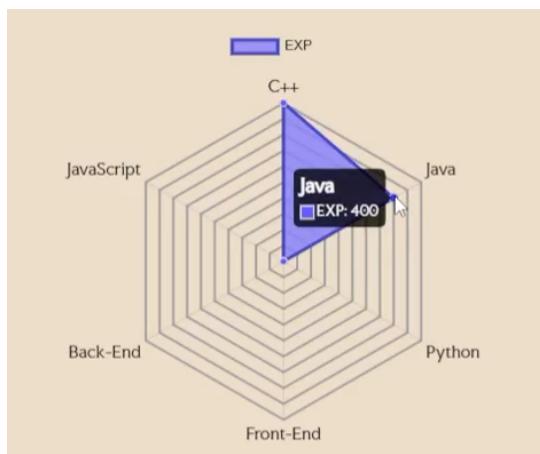
The Avatar is the image used to represent a student. In the current prototype, the image used is constant and cannot be changed. However, in future releases of Edutale this Avatar will reflect your current equipped items. For more information, see Section 6.1 (Nature of Prototype Build).

4.2.7 Day Counter

The day counter displays the number of days it has been since you created your account in Edutale. Since the current Edutale application is still a prototype, this day counter will display the accurate number for the Tester 1 account that is used within the prototype. This number will still increment daily, but its start reflects the start of the Tester 1 account.

4.2.8 Skill Graph

The skill graph displays the amount of EXP you have per skill in a radar graph. Hovering over any dot will display the specific amount of EXP you have for that skill:



This graph is automatically updated whenever you complete a quest corresponding to each skill. The amount of EXP you get towards a skill is the same as the amount of EXP you get towards your user level (see Section 4.2.10: User Bar).

4.2.9 Ongoing Quests

The Ongoing Quests section of the Mainpage shows the name and number of quests that are currently In Progress. Clicking on any quest will show a popup where you can see the quest's description, as well as decide whether to complete or quit the quest. You are limited to only having four quests In Progress at any given time, as having too many quests can cause you to lose focus.



4.2.10 User Bar

The user bar displays your name, total EXP, and current level. EXP is calculated using the following table:

| Action | Completing a Check-In | Completing a Beginner Quest | Completing an Intermediate Quest | Completing an Expert Quest |
|------------|-----------------------|-----------------------------|----------------------------------|----------------------------|
| EXP Earned | 20 | 100 | 200 | 400 |

The amount of EXP needed to level up starts at 100 EXP to level up from Level 1 to Level 2. The amount of EXP needed to level up for subsequent levels increases by 10 EXP per level.

4.2.11 Quest Board

The quest board recommends five quests that you can complete to strengthen your skills. The quests listed are currently alphabetized, but all quests will be quests that are not completed or ongoing.

4.2.12 Tutorial: Accepting a Quest on the Quest Board

Ensure that you have less than four In Progress quests before attempting to accept another quest. If you have four In Progress quests, either complete or quit a quest before accepting another quest.

- 1) Click on the Mainpage bookmark.
- 2) Click on a quest displayed on the Quest Board.
- 3) Click on “Accept Quest”.

4.2.13 Tutorial: Completing a Quest in Ongoing Quests

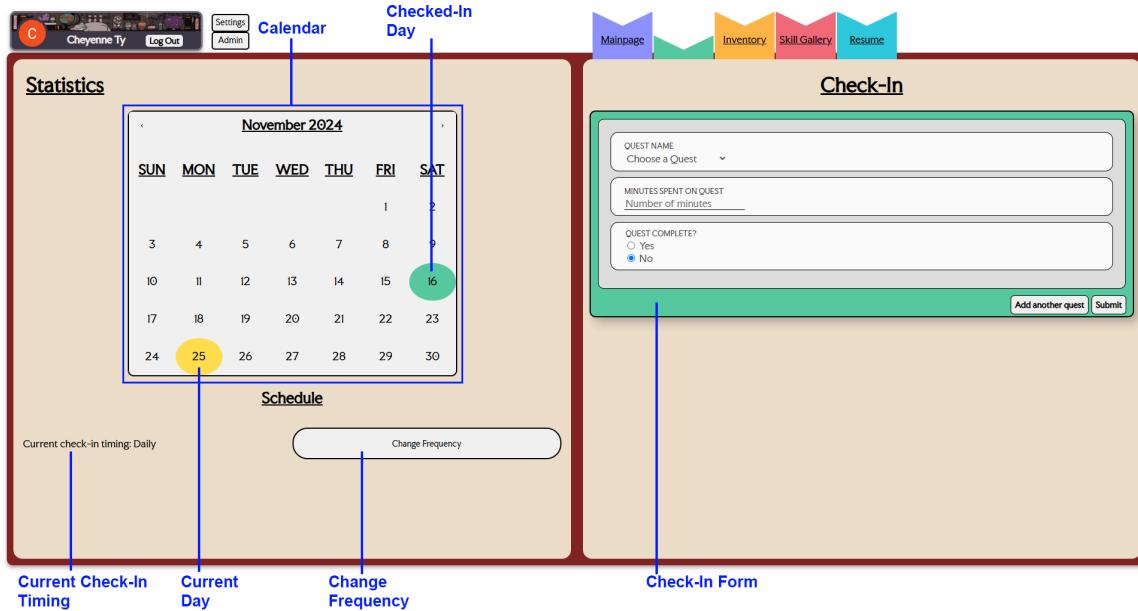
- 1) Click on the Mainpage bookmark.
- 2) Click on a quest listed under Ongoing Quests.
- 3) Click on “Complete Quest”.

4.2.14 Tutorial: Quitting a Quest in Ongoing Quests

- 1) Click on the Mainpage bookmark.
- 2) Click on a quest listed under Ongoing Quests.
- 3) Click on “Quit Quest”.

4.3 Check-In

4.3.1 Page Layout



4.3.2 Statistics

This section holds the calendar, which shows you the current day and all previous days you have checked in to Edutale. Previous check-in days are highlighted in green, while the current day is highlighted in yellow.

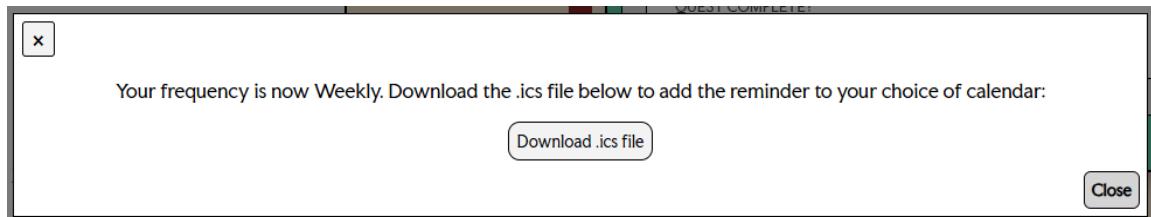
4.3.3 Schedule

This section displays your current check-in timing, as well as a button to change your frequency. Check-in timings can be daily, weekly, or monthly. When clicking on the “Change Frequency” button, a popup will appear that asks you to select your preferred

frequency.



After selecting a frequency, Edutale creates an iCalendar invite automatically so you can add your check-in to your preferred, third-party calendar application. This reminder event lasts between 8-9am, local time.



4.3.4 Check-In Form

This form allows you to record your progress towards quests and skills within the Edutale application. It is the primary way of recording the time you spend on particular quests, and whether or not you have completed any quests. This form can only be filled out once per day. After submitting this form, you will get a short summary of what you have achieved within the current check-in. You can still fill out a daily check-in even if you have not been notified, allowing you to record significant, in-the-moment progress when you have made it.

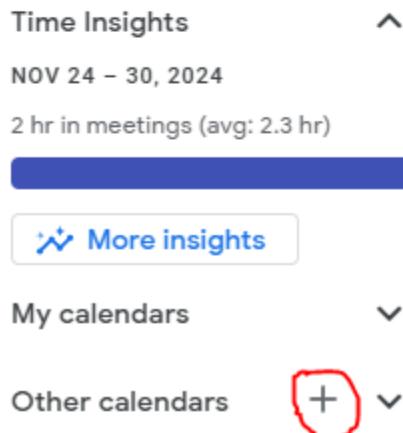
4.3.5 Tutorial: Changing Check-In Frequency

- 1) Click on the Check-In bookmark.
- 2) Click on “Change Frequency”.
- 3) Click on the frequency you would like (Daily, Weekly, or Monthly).
- 4) Click on “Save Changes”.
- 5) The popup should now display a confirmation that the new frequency was selected, as well as a button with the text “Download .ics file”. Click on this button in order to download an iCalendar invite for your selected frequency.
- 6) Click “Close”.

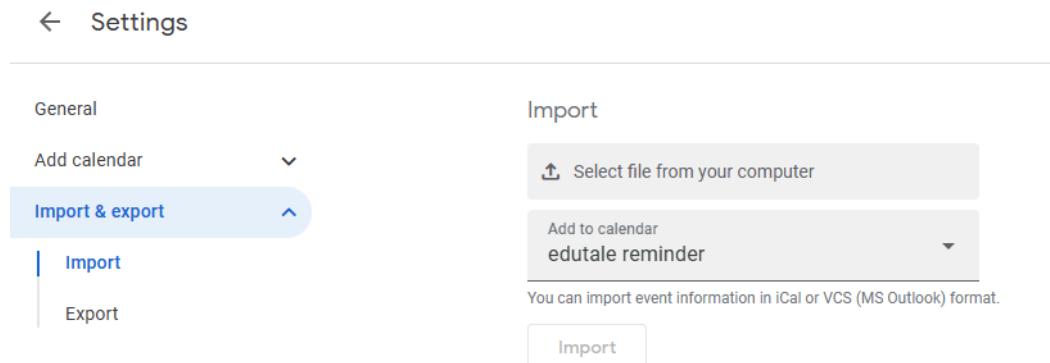
4.3.6 Tutorial: Adding iCalendar File to Google Calendar

It is possible to use Edutale’s iCalendar invite in different calendar applications (ex. Apple Calendar, Microsoft Outlook, etc.). Here, we provide one tutorial for adding an iCalendar file to Google Calendar.

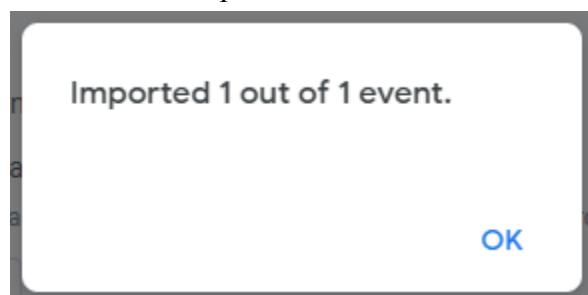
- 1) Go to your account's Google Calendar.
- 2) On the left sidebar, there is a drop down titled "Other calendars" with a "+" symbol next to it. Click on the "+" symbol.



- 3) Click on "Import".
- 4) Near the center of the screen, there should be a box that says "Add to calendar". If you want to change the calendar that the reminder is on, click on this box and choose your desired calendar on the drop down menu.



- 5) Near the center of the screen, there should be a box that says "Select a file from your computer". Click on this box.
- 6) In the File Explorer window that appears, locate the "edutale-calendar.ics" file and double click on it. The text for the box should now say "edutale-calendar.ics".
- 7) Click on the "Import" button. You should now see this confirmation message:



- 8) Click on “OK”. The Edutale reminder is now added in your Google Calendar.

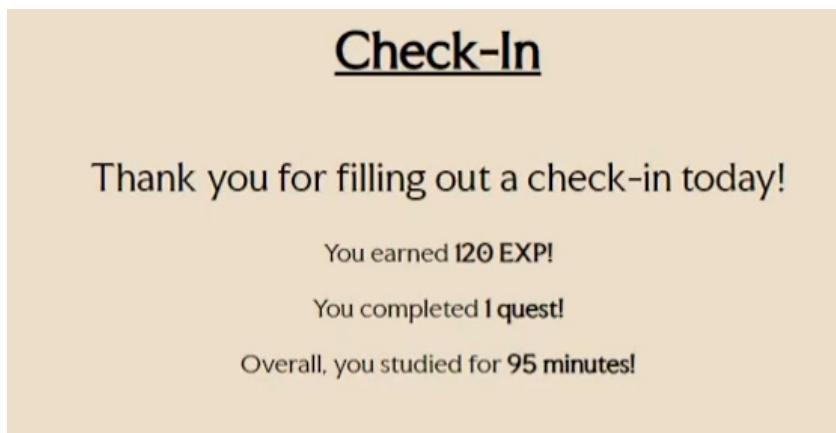
4.3.7 Tutorial: Filling out a Check-In

- 1) Click on the Check-In bookmark.
- 2) Click on the “Choose a Quest” dropdown. From here, select the quest you want to record progress in.
- 3) Under “MINUTES SPENT ON QUEST”, enter the number of minutes you spent on the quest (whole numbers only).
- 4) Under “QUEST COMPLETE?”, if you completed the quest click on the button that says “Yes”. Otherwise, click on the button that says “No”.
- 5) If you have multiple quests you want to record progress in, click on the “Add another quest” button. Repeat Steps 2-4 for this additional quest.
- 6) If you want to delete an entry for a quest in the Check-In form, click on the X button that appears when there are multiple quests in the form.



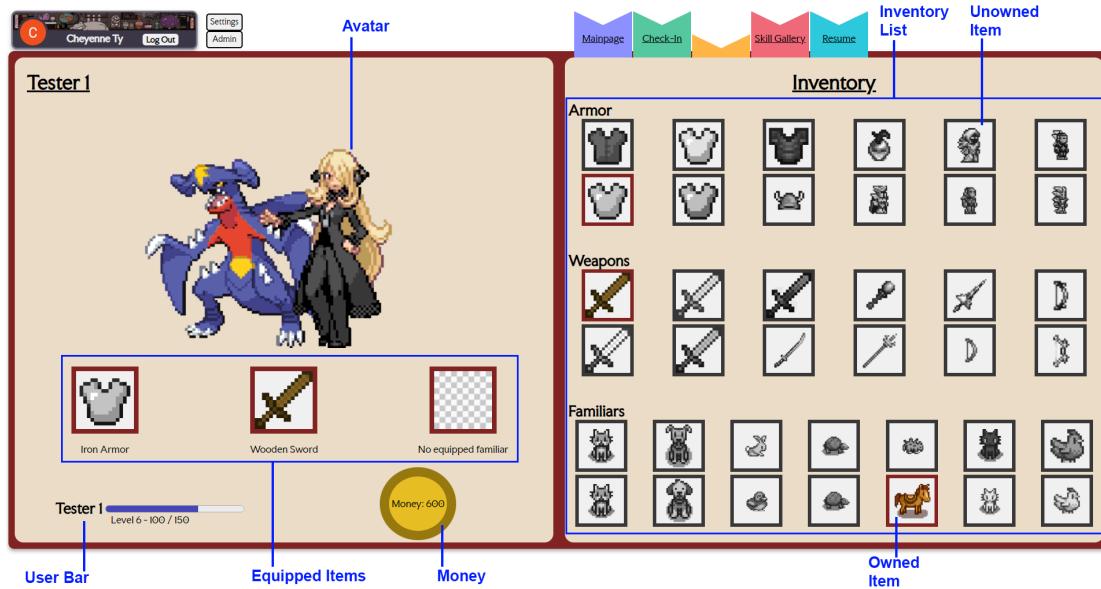
The form consists of three main sections: 1. Quest Name: A dropdown menu labeled "Choose a Quest". 2. Minutes Spent on Quest: A text input field labeled "Number of minutes". 3. Quest Complete?: A radio button group with "Yes" and "No" options, where "No" is selected. A red circle highlights the close (X) button in the top-left corner of the form area.

- 7) When you are done filling out your progress, click on the “Submit” button.
- 8) As a confirmation, there will be a summary screen that appears. This screen shows the total EXP you earned, number of minutes studied, and number of quests completed.



4.4 Inventory

4.4.1 Page Layout



4.4.2 Avatar

The Avatar is the image used to represent a student. This is the same image used on the Mainpage.

4.4.3 Equipped Items

This section of the Inventory page displays the armor, weapon, and familiar you have currently equipped. In future versions of Edutale, your avatar will change to reflect these equipped items.

4.4.4 User Bar

The user bar displays your name, total EXP, and current level. This level bar is the same as the one found on the Mainpage.

4.4.5 Money

The money token displays the amount of money you currently have. Money is earned from leveling up; every level gives 100 money.

4.4.6 Inventory List

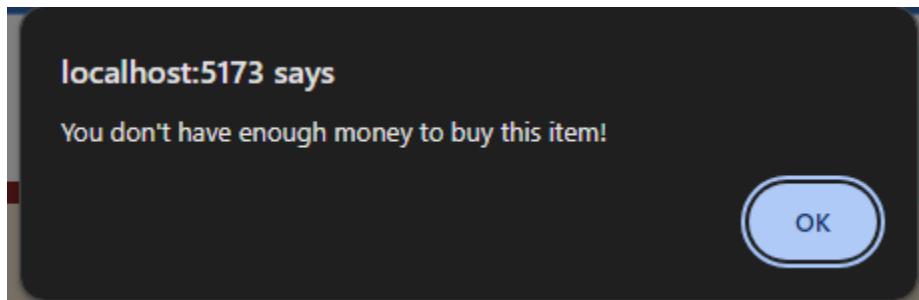
The inventory list displays all of the inventory items currently in Edutale. It also displays items you currently own/don't own. Items you have will have a colored border and a colored picture. Items you do not own will have a gray border and a grayed-out picture. Clicking on owned items allows you to equip them. Clicking on unowned items allows you to purchase them, so long as you have the money to do so.

4.4.7 Tutorial: Buying an Item

Ensure that you have enough money for the item you want to purchase. The amount of money an item costs is displayed in the popup that appears when you click on the item.

- 1) Click on the Inventory bookmark.
- 2) Click on the item you want to purchase.
- 3) Click on the “Purchase Item” button.

If you did not have enough money to purchase the item, this popup will appear in order to inform you that you do not have enough money.

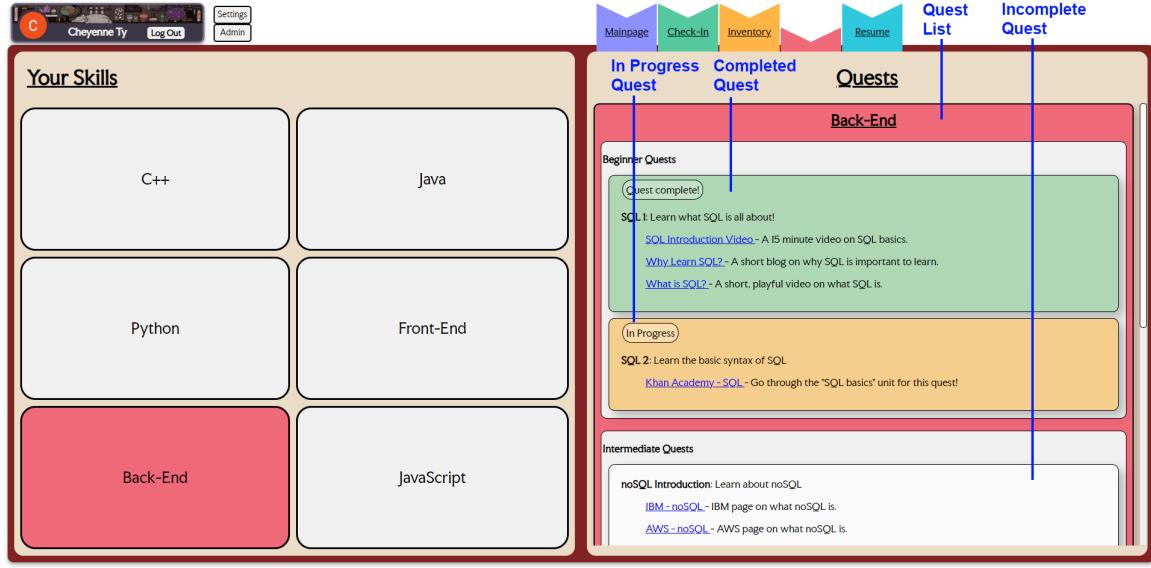


4.4.8 Tutorial: Equipping an Item

- 1) Click on the Inventory bookmark.
- 2) Click on the owned item you want to equip.
- 3) Click on the “Equip Item” button.

4.5 Skill Gallery

4.5.1 Page Layout



4.5.2 Your Skills

This section displays the skills that you are currently following. Clicking on any of these skills will display a list of quests related to that skill on the right page of the screen.

4.5.3 Quests

This section displays the quests that are related to the currently selected skill. Quests are organized by their difficulty level (Beginner, Intermediate, and Expert). Completed quests are highlighted in green. In Progress quests are highlighted in orange. Incomplete quests are quests that have not been accepted yet. All quests display the resources that can help you complete the quest.

4.5.4 Tutorial: Accepting a Quest in the Skill Gallery

Ensure that you have less than four In Progress quests before attempting to accept another quest. If you have four In Progress quests, either complete or quit a quest before accepting another quest.

- 1) Click on the Skill Gallery bookmark.
- 2) Click on a Skill under “Your Skills”. This brings up the Quest List for that skill.
- 3) Click on any quest marked as Incomplete, which can be seen with a plain white background.

- 4) Click on “Accept Quest”.

4.5.5 Tutorial: Completing a Quest in the Skill Gallery

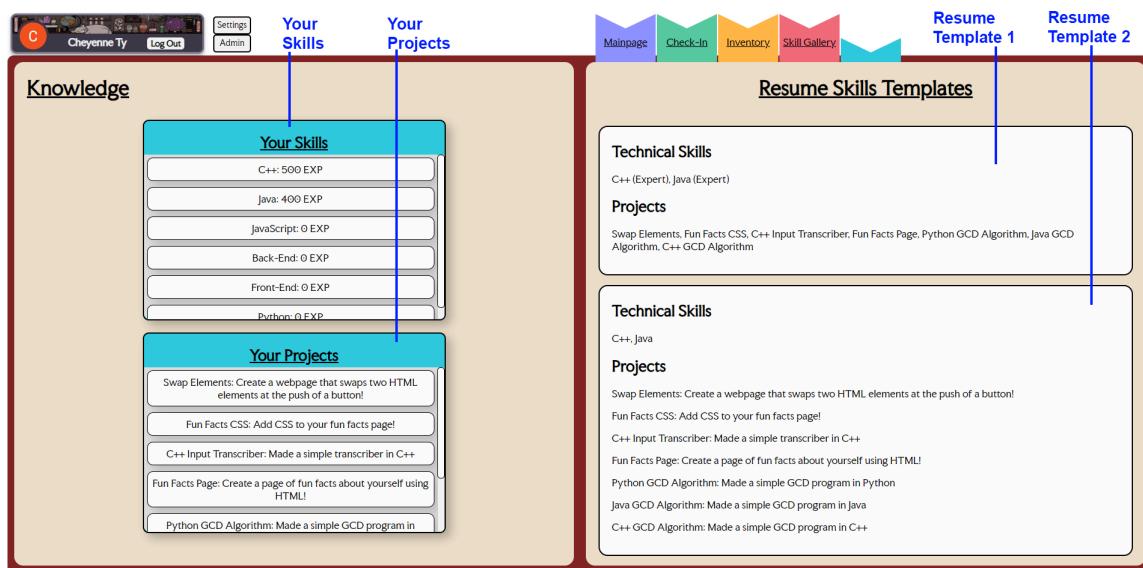
- 1) Click on the Skill Gallery bookmark.
 - 2) Click on a Skill under “Your Skills”. This brings up the Quest List for that skill.
 - 3) Click on any quest marked as In Progress, which can be seen with a plain white background.
 - 4) Click on “Complete Quest”.

4.5.6 Tutorial: Quitting a Quest in the Skill Gallery

- 1) Click on the Skill Gallery bookmark.
 - 2) Click on a Skill under “Your Skills”. This brings up the Quest List for that skill.
 - 3) Click on any quest marked as In Progress, which can be seen with a plain white background.
 - 4) Click on “Quit Quest”.

4.6 Resume

4.6.1 Page Layout



4.6.2 Your Skills

This section displays the skills that are currently being tracked, alongside the amount of EXP you have earned for that skill. The skills will be ordered from most to least EXP.

4.6.3 Your Projects

This section displays the projects you have successfully completed. The projects are ordered from hardest to easiest difficulty (from Expert to Intermediate to Beginner).

4.6.4 Resume Skills Templates

This section shows two different types of templates that you can use for your resume. The first template focuses more on your proficiency within each skill. The second template focuses more on the projects you have completed. These templates will be further updated in future versions of Edutale. For the first template, the amount of skill EXP required to obtain each proficiency is as follows:

- Beginner: Between 1 and 2499 EXP
- Intermediate: Between 2500 and 4999 EXP
- Expert: At least 5000 EXP

5. Overview of Admin Page

This section details the layout of the pages accessible to administrators of Edutale, as well as the different functions administrators can do on each page. These pages will not be accessible to students of Edutale in the release version, and the “Admin” button on every page will not be present when logged in as a student. However, the current prototype build of Edutale does allow for any user to see the Admin Page. For more information, please refer to Section 6.1 (Nature of Prototype Build).

5.1 Quests Tab

The Quests tab allows administrators to manage quests within Edutale. Administrators can:

- Create new quests by specifying the quest name, description, difficulty level (1-3), and whether it's a project.
- Update existing quests' names and descriptions.
- Delete quests from the system.
- Add or remove skills associated with quests.
- Add or remove resources associated with quests.



5.1.1 Add New Quest

- 1) Click on the “Add New Quest” button.
- 2) Enter a name for the quest.
- 3) Enter a description for the quest.
- 4) Select a difficulty for the quest.
- 5) Select the type of quest.
- 6) Click on the “Add Quest” button.

5.1.2 Update Quest

- 1) Click on the “Update Quest” button.
- 2) Select a quest to update.
- 3) Enter a new name for the quest **or** a new description for the quest.
- 4) Click on the “Update Quest” button.

5.1.3 Delete Quest

- 1) Click on the “Delete Quest” button.
- 2) Select a quest to delete.
- 3) Click on the “Delete quest” button.

5.1.4 Add Skill to Quest

- 1) Click on the “Add Quest Skill” button.

- 2) Select a quest to add a skill towards.
- 3) Select a skill to add to the selected quest.
- 4) Click on the “Add Skill” button.

5.1.5 Remove Skill from Quest

- 1) Click on the “Delete Quest Skill” button.
- 2) Select a quest to remove a skill from.
- 3) Select a skill from the quest to remove.
- 4) Click on the “Delete Skill” button.

5.1.6 Add Resource to Quest

- 1) Click on the “Add Quest Resource” button.
- 2) Select a quest to add a resource towards.
- 3) Select a resource to add to the selected quest.
- 4) Click on the “Add Resource” button.

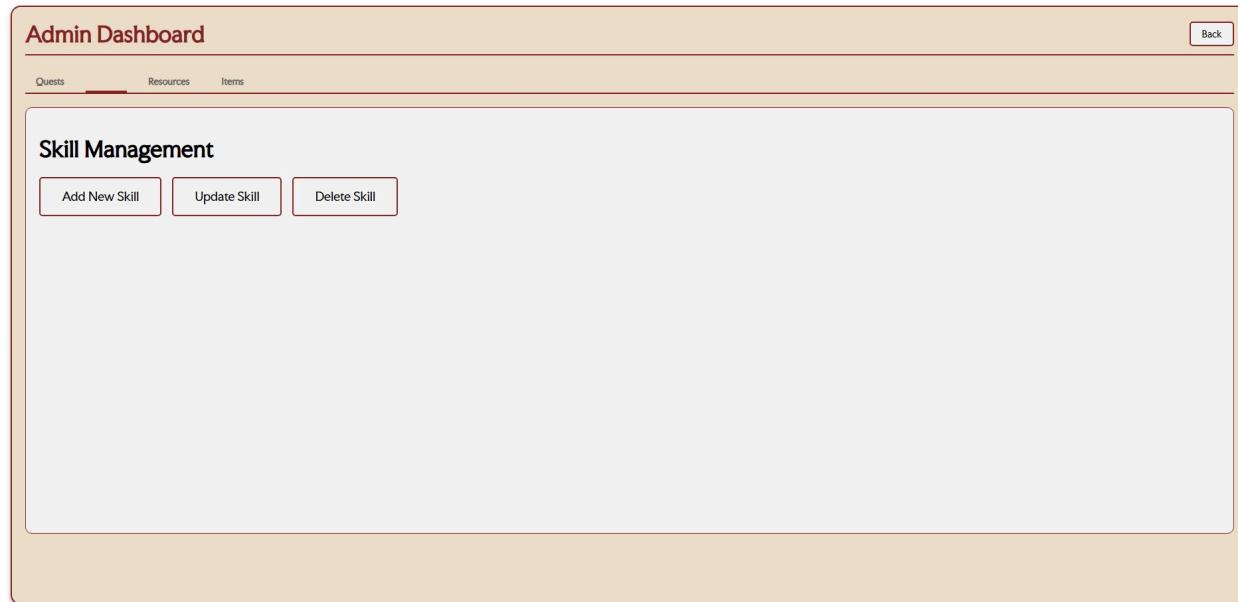
5.1.7 Remove Resource from Quest

- 1) Click on the “Delete Quest Resource” button.
- 2) Select a quest to remove a resource from.
- 3) Select a resource from the quest to remove.
- 4) Click on the “Delete Resource” button.

5.2 Skills Tab

The Skills tab enables administrators to manage skills tracked within Edutale. Administrators can:

- Create new skills by providing a skill name and description.
- Update existing skills' names and descriptions.
- Delete skills from the system.



5.2.1 Add New Skill

- 1) Click on the “Add New Skill” button.
- 2) Enter a name for the skill.
- 3) Enter a description for the skill.
- 4) Click on the “Add Skill” button.

5.2.2 Update Skill

- 1) Click on the “Update Skill” button.
- 2) Select a skill to update.
- 3) Enter a new name for the skill **or** a new description for the skill.
- 4) Click on the “Update Skill” button.

5.2.3 Delete Skill

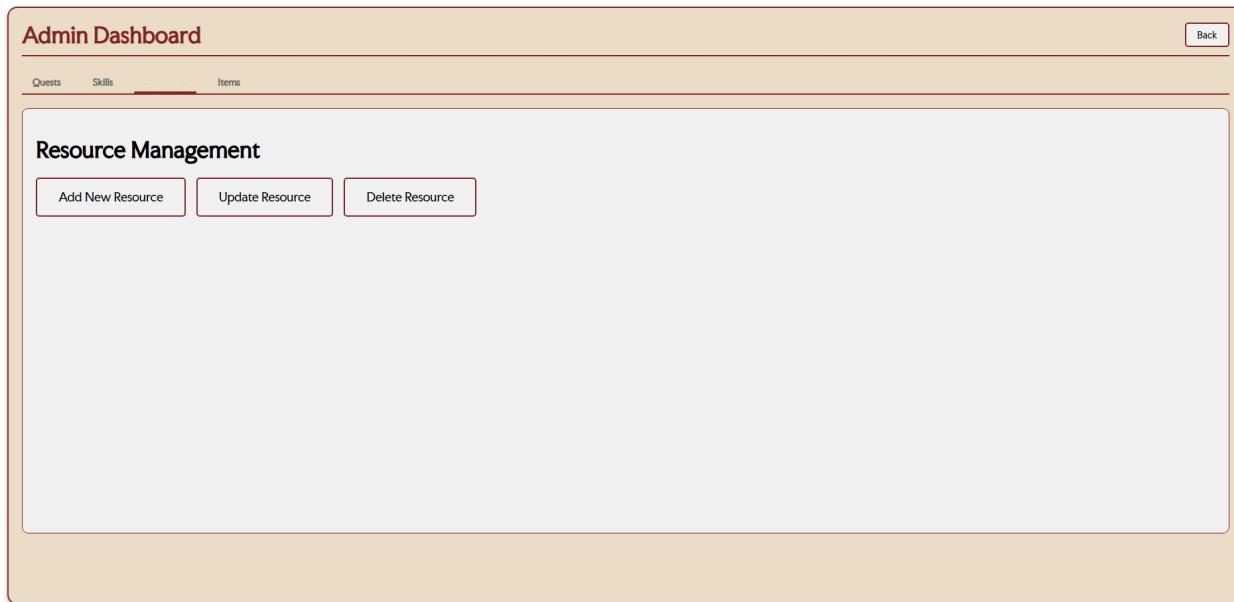
- 1) Click on the “Delete Skill” button.
- 2) Select a skill to delete.
- 3) Click on the “Delete Skill” button.

5.3 Resources Tab

The Resources tab allows administrators to manage learning resources. Administrators can:

- Create new resources by specifying the resource name, link, description and type (Video, Article, Tutorial, Exercise, Documentation, or Tool).

- Update existing resources' information.
- Delete resources from the system.



5.3.1 Add New Resource

- 1) Click on the “Add New Resource” button.
- 2) Enter a name for the resource.
- 3) Enter the link for the new resource.
- 4) Enter a description of the resource.
- 5) Select the type of resource that is being added.
- 6) Click on the “Add Resource” button.

5.3.2 Update Resource

- 1) Click on the “Update Resource” button.
- 2) Select a resource to update.
- 3) Enter any or multiple of these options:
 - a) Enter a new name for the resource.
 - b) Enter a new link for the resource.
 - c) Enter a new description for the resource.
 - d) Select a new type for the resource.
- 4) Click on the “Update Resource” button.

5.3.3 Delete Resource

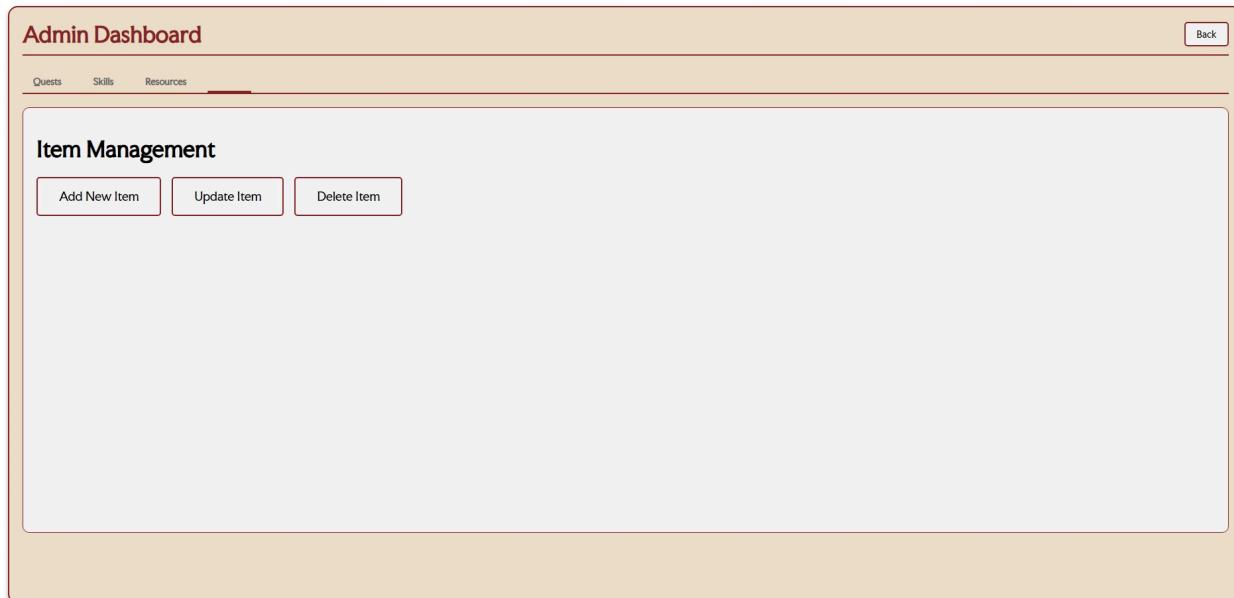
- 1) Click on the “Delete Resource” button.

- 2) Select a resource to delete.
- 3) Click on the “Delete Resource” button.

5.4 Items Tab

The Items tab enables administrators to manage inventory items. Administrators can:

- Create new items by providing the item name, type (Armor, Weapon, or Familiar), and price.
- Update existing items' information.
- Delete items from the system.



5.4.1 Add New Item

- 1) Click on the “Add New Item” button.
- 2) Enter a name for the new item.
- 3) Select the type of item it will be.
- 4) Enter a price for the item.
- 5) Click on the “Add Item” button.

5.4.2 Update Item

- 1) Click on the “Update Item” button.
- 2) Select an item to update.
- 3) Enter any or multiple of these options:
 - a) Enter a new name for the selected item.
 - b) Select a new type for the selected item.

- c) Enter a new price for the selected item.
- 4) Click on the “Update Item” button.

5.4.3 Delete Item

- 1) Click on the “Delete Item” button.
- 2) Select an item to delete.
- 3) Click on the “Delete Item” button.

6. Disclaimers

6.1 Nature of Prototype Build

As Edutale is still a prototype application, there are several design choices or incomplete, non-essential functionalities. These shall be resolved in future development of the application:

- Currently, the image for the avatar is a placeholder. Future updates will personalize the avatar depending on the items currently equipped.
- The `Preloader` folder contains files for a loading screen. This screen will be implemented throughout the application in a future update.
- Quests seen in Ongoing Quests or the Quest Board have placeholder images that may not reflect the skills related to the quest. Future updates will ensure that appropriate images are associated with each quest. For information on the source of these images, refer to Section 6.3 (Assets in Edutale).
- Careers have not been implemented yet due to the scope of the application. As such, some functionalities related to choosing different careers have not yet been added.
- The Settings tab currently only has placeholder text. Future updates will include ways for users to style their webpage.
- There is no differentiation between students and administrators in the current prototype build of Edutale. So, users designated as students may still have access to the Admin page. Future updates will ensure that authorized users are the only people with administrator privileges in Edutale. However, anyone can use the Admin page right now in order to show that it is properly functioning.
- On the Quest Board in the Mainpage, every quest has a marker titled “Languages”. These markers are for future subtags, and currently every quest displays the same subtag.

6.2 Known Issues

As Edutale is still a prototype application, there are known technical issues related to its execution. These issues shall be resolved in future development of the application:

- Switching from different bookmark tabs may result in a brief white flash of the screen.
- Zooming in/out of the application may result in disorganization among the components of each page.
- The layout of pages is correct for Microsoft Edge and Google Chrome. Other browsers may not render Edutale's pages correctly.
- Edutale may ask you to log in repeatedly if your browser does not store cookies. This does not affect the performance of Edutale, but may be frustrating to some users.
- New Skills added through the Admin page do not visually display on the frontend of Edutale. This is because Skills are linked to each Career, but the prototype currently only has one default Career that all students are enrolled in.
- The user profile image in the top left corner may occasionally be absent.

6.3 Assets in Edutale

Currently, Edutale uses assets taken from external sources within the login page, user profile header, and inventory. Team Plasma does not hold the rights for these images, and they serve as placeholders for official images we will use in future builds. As the Edutale software is a class project only, it is defined as a non-commercial activity and is used for an educational purpose. The prototype of Edutale will not be distributed other than for class submission purposes as to not affect the current or any potential markets of the asset owners. This aligns our project with fair use. Additionally, some assets may be altered slightly from their original source, such as through removing the background of the image or resizing the image. For a full list of the used assets in Edutale, please refer to Appendix A (Used Assets). A release version of Edutale would not include any of these used assets.

6.4 Provided Quests and Resources

The Edutale prototype holds example quests and resources for all six skills currently available in the application. These quests and resources may not display the most optimal progression towards topics and languages. Further development for the Edutale application will include a more robust, structured set of quests and resources.

Appendix A: Used Assets

| Asset Name in Edutale | Asset Source | URL to where Asset was found |
|-----------------------|--|---|
| avatar.gif | Animation of Cynthia and Garchomp from | https://tenor.com/view/animation-pixel-art-garchomp-cynthia |

| | | |
|------------------------|---|---|
| | <i>Pokemon: Black 2 / White 2</i> | -gif-15793261332433284025 |
| background.jpg | “Creating My Dream Library” blog post by Brigitta Blair | https://briggittablair.com/blog/creating-my-dream-library/ |
| cpp.png | Official C++ logo for the C++ Foundation | https://github.com/isocpp/logo |
| html_icon.png | “Html free icon” by Freepik | https://www.flaticon.com/free-icon/html_1197396 |
| profileBanner.png | TK Krussow on Instagram (@tkcreates) | https://www.instagram.com/tkcreates/p/CxGQdm8rlCP/ |
| crimson_armor.png | “Adamantite armor” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Adamantite_armor |
| dark_armor.png | “Netherite Chestplate” from <i>Minecraft</i> | https://minecraft.wiki/w/File:Netherite_Chestplate_(item)_JE1.png |
| diamond_armor.png | “Diamond Chestplate” from <i>Minecraft</i> | https://minecraft.wiki/w/File:Diamond_Chestplate_(item)_JE1_BE1.png |
| fancy_knight_armor.png | “Knight’s Helmet” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/Knight%27s_Helmet |
| fireproof_armor.png | “Molten armor” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Molten_armor |
| ghost_armor.png | “Spectre armor” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Spectre_armor |
| gold_armor.png | “Gold Chestplate” from <i>Minecraft</i> | https://minecraft.wiki/w/File:Golden_Chestplate_(item)_JE1_BE1.png |
| holy_armor.png | “Hallowed armor” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Hallowed_armor |
| iron_armor.png | “Iron Chestplate” from <i>Minecraft</i> | https://minecraft.wiki/w/File:Iron_Chestplate_(item)_JE1_BE1.png |
| leather_armor.png | “Leather Tunic” from | https://minecraft.wiki/w/File:Leather_Tunic_(item)_JE1_BE1.png |

| | | |
|--------------------|---|---|
| | <i>Minecraft</i> | eather_Tunic_(item)_JE3_BE2.png |
| titanium_armor.png | “Titanium armor” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Titanium_armor |
| viking_helmet.png | “Warrior Helmet” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/Warrior_Helmet |
| basset_hound.png | “Dog 3” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Dog_3.png |
| black_cat.png | “Cat 5” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Cat_5.png |
| brown_chicken.png | “Brown Chicken” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Brown_Chicken.png |
| dinosaur.png | “Dinosaur” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Dinosaur.png |
| duck.png | “Duck” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Duck.png |
| horse.png | “Horse” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Horse.png |
| purple_turtle.png | “Iridium Turtle” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Iridium_Turtle.png |
| rabbit.png | “Rabbit” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Rabbit.png |
| retriever.png | “Dog 1” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Dog_1.png |
| tabby_cat.png | “Cat 1” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Cat_1.png |
| turtle.png | “Turtle” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Turtle.png |
| tuxedo_cat.png | “Cat 2” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Cat_2.png |
| white_cat.png | “Cat 4” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/File:Cat_4.png |
| white_chicken.png | “White Chicken” from | https://stardewvalleywiki.com/ |

| | | |
|-------------------|--|---|
| | <i>Stardew Valley</i> | File:White_Chicken.png |
| dark_sword.png | “Netherite Sword” from <i>Minecraft</i> | https://minecraft.wiki/w/File:Netherite_Sword_JE1.png |
| diamond_sword.png | “Diamond Sword” from <i>Minecraft</i> | https://minecraft.wiki/w/File:Diamond_Sword_JE1_BE1.png |
| gold_bow.png | “Gold Bow” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Gold_Bow |
| gold_sword.png | “Gold Sword” from <i>Minecraft</i> | https://minecraft.wiki/w/File:Golden_Sword_JE2_BE1.png |
| holy_lance.png | “Hallowed Jousting Lance” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Hallowed_Jousting_Lance |
| ice_bow.png | “Ice Bow” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Ice_Bow |
| ice_rod.png | “Ice Rod” from <i>Stardew Valley</i> | https://stardewvalleywiki.com/Ice_Rod |
| iron_bow.png | “Iron Bow” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Iron_Bow |
| iron_sword.png | “Iron Sword” from <i>Minecraft</i> | https://minecraft.wiki/w/File:Iron_Sword_JE1_BE1.png |
| katana.png | “Katana” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Katana |
| trident.png | “Trident” from <i>Terraria</i> | https://terraria.fandom.com/wiki/Trident |
| wooden_sword.png | “Wooden Sword” from <i>Minecraft</i> | https://minecraft.wiki/w/File:Wooden_Sword_JE1_BE1.png |