

# CP476 Tutor Scheduler Project Proposal

## 1. Project Description

Due to the nature of the tutoring industry, communications between the tutor and the parent of the enrolled student are often done through an intermediary party. As there are limited options, often times this intermediary party brings forth miscommunication, or lack of communication to the parents, and tutors. Our proposed project is a scheduler web application that is geared towards the tutoring industry to improve communication between the enrolled students and educational staff. The main premise is to have schedules, bookings, cancellations and communication all on one platform that is operable at any time of the day. To date, many tutoring businesses create schedules and communicate through Microsoft Excel and email. This often causes wasted resources as there is a lot of confusion between business administrators and tutors unaware whether their scheduled student will arrive or not. To mitigate this cause and effect, our implementation will allow students/parents to cancel or reschedule their appointments which will then be directly visible to the business administrators and the tutors.

## 2. Specification of Users

The app will have different functionalities depending on whether the account type is of a student, tutor, or business admin. The student account type will often be controlled by the parent to assign their children to tutoring services. The parents will have limited abilities on the platform, as rebookings and schedulings need to be approved by the business admin account type. The tutor account type will be controlled by the employees of the tutoring business, they are in charge of teaching the classes that have been assigned to them. The business admin account is often controlled by the administrators of the tutoring business, or the business owners. The following features will be available to the following users:

### *A. Business Admin Account Functions*

- Accept/reject shift swap (page)
- Edit time block (page)
- Review cancellation/rebook class forms (page)
- Add Tutor and Student. (page)
- Payroll info (page)

### *B. Tutor Account Functions*

- Cancel/Rebook class (form)
- View schedule of all assigned classes (schedule page)
- Swap shifts (form)
- Payroll info (page)

### *C. Student Account Functions*

- Cancel class (form)
- Rebook class (form)
- View upcoming class/be notified of upcoming class (page)

### **3. Functionality**

#### **A. Cancel Classes form**

##### *Tutor Cancels Class*

- Sends form which goes to business admin for approval.
- If approved, form goes to students registered in the cancelled class.
- Makeup classes may be setup depending on whether or not it was a 1 on 1 class (1 on 1 classes will usually not need a makeup unless requested by the parent).

##### *Student Cancels Class*

- Sends form which goes to both business admin and tutor upon form completion
- Tutor will get a form regarding whether they think the student needs a makeup session (depends if student is part of a larger group that is being tutored and is behind from classmates). If makeup session is needed the business admin will be then notified to create a new time block for said session and business will send confirmation to both parties.
- Rebooking will be needed if tutor deems appropriate. Otherwise it will not be required if the class size is no bigger than just the single student. Rebooking form will then be sent to business and business will send confirmation to both parties.

##### *Business Admin Cancels Class*

- In case of building closure, weather event, etc the business admin can cancel class which will send a notification to the affected students and tutors.

#### **B. Makeup Classes form**

Business will be notified by party wishing to cancel scheduled class. If tutor cancellation, form must be accepted before rebooking commences. If student rebooking, form must adhere to specific times and availability of assigned tutor or other available tutors. These specific times will correlate to the business admin's discretion on availability and resources. Otherwise, class will be forfeited and rebooking notifications will not be sent out. Once rebooking form is sent, tutor and student will get confirmation notifications.

#### **C. Shift Swap Form**

Form to be filled by tutor account type to request a shift swap with other tutors and queued for acceptance by a business admin account type.

#### **D. Payroll Information Page**

Page viewed by tutor and business admins. The payroll information for the tutor will contain the weekly wage for that specific tutor account. The business admins payroll information will contain the weekly wage for all tutor accounts, as well as the cost of service paid by the students.

### E. Weekly Tutoring Schedule Page

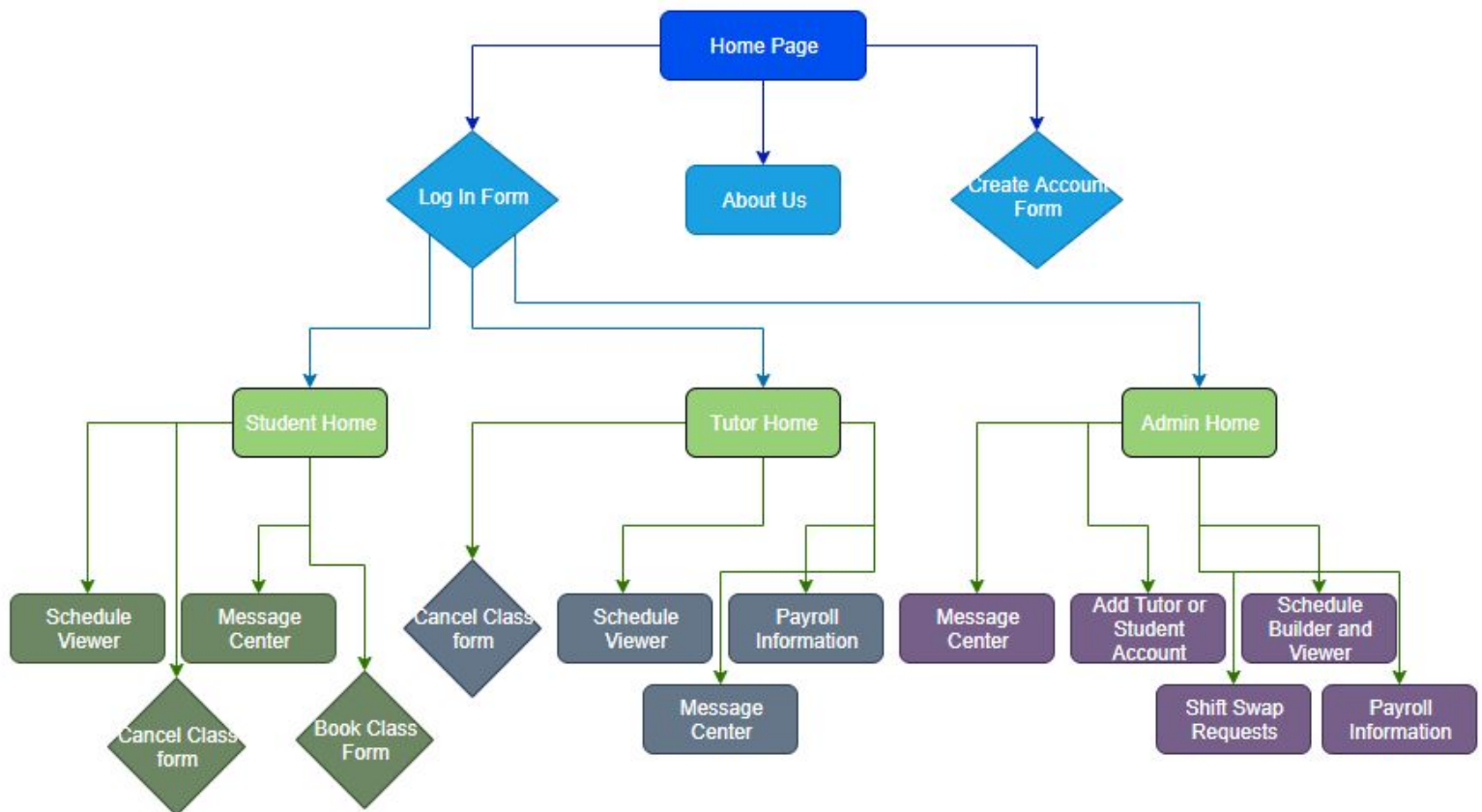
The tutoring schedule will be viewable by all users. Different variations and options of the schedule will be available to commensurate the different users types.

Tutor - gets all assigned classes

Business admin - can edit all assign classes

Student - sees classes relevant only to them (as well as class size)

## 4. Structure of Website



## 5. Milestones and Timelines

Deliverables	Requirements	Deadline
<i>Template</i>	Need to create basic skeleton of pages in HTML, while making sure that the template is consistent across all pages, not too complex and the navigation is simple.	<b>February 12th, 2020</b>
<i>Design</i>	<p>Need to have a website design with the following principles:</p> <ol style="list-style-type: none"><li>1. Consistent across all pages</li><li>2. Compatible with various screen sizes.</li><li>3. Complementary color palette</li><li>4. Optimized image sizes for fast loading</li></ol> <p>To enforce consistency across pages, we must keep CSS files to a minimum to ensure that most HTML pages are linked to the same CSS file. To meet the compatibility principle we must perform regular testing across different screen sizes during the design phase. An appropriate colour theme must be chosen with respect to images and website audience. With the use of tints, shades and tones on various page containers the colours will not clash. To optimize images we will choose image dimensions wisely, and reduces the file size of the images with standard compression.</p>	<b>February 18th, 2020</b>
<i>Functionality</i>	<p>We need to include functionality that differs from account type; student, tutor and business admin.</p> <p>This will be done with the use of API's and JavaScript libraries.</p>	<b>March 5th, 2020</b>
<i>Database Design</i>	<p>Design normalized database with appropriate tables, tuples in correspondence with front end requirements. This will be done with the support of diagrams to use as a reference.</p> <p>Database also needs to support concurrent connections. Functions and procedures will be created to protect any private information that may be stored in the database.</p>	<b>March 18th, 2020</b>
<i>Database Connection</i>	<p>Done with the use of server-side languages. Optimized queries will be designed to fulfill the</p>	<b>March 26th, 2020</b>

	needs of the users, and website functionality. Queries will also be secure from SQL injection attack by parameterizing any input that is passed to a SQL statement.	
<i>Completion</i>		<b>March 29th, 2020</b>