**Student-Tutor Check-In System**

*Robert, Brian, Kyle, Chris, Matt, Andy*

**High Concept**

The Code Samurai and Tutor-Track services both suffer from long, arduous processes for clocking in as a tutor and checking in students. This problem results in inaccurate tutor and student records as well as sparse, inaccurate data that cannot be used to evaluate the performance of the program and make it better. To Solve this problem, we propose a web application that offers tutors and students quick and painless clock-in and check-in services. Additionally, we propose that this web application also provides users with tools to evaluate the performance of their tutoring program in respect to students, tutors, and courses tutored.

**Platform**

This project will be developed as a web application using PHP and MySQL for the backend as well as html and JavaScript for the front end.

**Features**

*Users and Roles*

* Users have **roles** such as **student, tutor,** and **admin.**
* **Admins** create, monitor, and control **tutor groups** which represent individual tutoring programs (eg. Code Samurai).
* All users have one **student** role.
* Users can have multiple **tutor** roles, each of which is associated with a specific **tutor group**.
* To be a **tutor** for a specific **tutor group**, you need to be invited to the tutor group by one of its **admins.**
* Users can have multiple **admin** roles, each of which is associated with a specific **tutor group.**
* To be an **admin** for a specific **tutor group**, you need to either have created the **tutor group** or have been invited by an existing **admin** of the **tutor group**.

*User Data*

* Users have **mandatory** **data**, which they must fill out to have an account, **optional data**, which they can fill out at any time, and **generated data**, which is generated by the web application.
* **Optional data** includes first name, and last name.
* **Mandatory data** includes username, password, and email.
* **Generated data** includes a system generated id (user-id) that the system will use to identify users.

*Role-Specific Data*

* Each role that a user has is associated with data specific to that role.
* **Roles** have **mandatory data,** which users must fill out when creating that **role**, **optional data**, which they can fill out at any time, and **generated data**, which is generated from the web application.
* The **student role** has no **mandatory data** or **generated data**.
* The **student role** has the following **optional data**: year in school, and student id.
* The **tutor role** has the following **generated data**: Tutor Group ID (the system will use this to identify the **tutor group** for which the **tutor role** belongs).
* The **tutor role** has the following **mandatory data**: tutor schedule (schedule of hours that the tutor works), and tutor course list (list of courses that the tutor can help students with).
* The **tutor role** has no **optional data**.
* The **admin role** has no **mandatory data**, **optional data,** or **generated data.**

*Tutor Group Data*

* **Tutor Groups** have **mandatory data,** which **admins** must fill out when creating that **tutor group**, **optional data**, which **admins** can fill out at any time, and **generated data**, which is generated from the web application.
* A **tutor group** has the following **mandatory data**: name (what is the tutor group called?), schedule (what is the service’s hours), course list (from which tutors select their courses).
* A **tutor group** has no **optional data**.
* A **tutor group** has the following **generated data**: tutor group id.

*User-Role Privileges*

* Except for a small subset of **public privileges** (what are non-users allowed to see and do) and **user privileges** (what are all users allowed to see and do regardless of role), what a user can do is directly related to their **roles**.
* All users have the same **student** privileges.
* Users only have **tutor** or **admin privileges** in respect to the **tutor groups** to which their roles are tied to.

*Public Privileges*

* Non-users can **create an account** to become a user.

*User Privileges*

* A **user** can **log in** and **log out** of their account.
* A **user** can **alter their user data** (username, password, email, first name, last name)**.**
* A **user** is created with a **student role** already.
* A **user** can **create an admin role**.
* A **user** can **delete an** **admin role**.
* A **user** can **accept a tutor role** from an invitation sent by an **admin** of a **tutor group**.
* A **user** can **delete a tutor role**.
* A **user** can **delete** **their account**.
* A **user** can **view their admin roles.**
* A **user** can **view their tutor roles**.

*Student Privileges*

* A **student** can alter their **student data** (year in school, student id).
* A **student** can view **most recent** **tutor groups**.
* A **student** can view **most recent tutors.**
* A **student** can **add a tutor group** to their **Favorite Groups** list (each student has a list of **tutor groups** that they can make for their convenience).
* A **student** can **remove a tutor group** from their **Favorite Groups** list.
* A **student** can **add a tutor** to their **Favorite Tutors** list (each student has a list of **tutors** that they can make for their convenience).
* A **student** can **remove a tutor** from their **Favorite Tutors** list.
* A **student** can **lookup a tutor group** by **keyword.**
* A **student** can **lookup a tutor group** by **tutor**.
* A **student** can **lookup a tutor** by **keyword**.
* A **student** can **check-in** with a **tutor** by **generating a QR Code** for the **tutor** to scan.
* A **student** can **check-in** with a **tutor** by **looking up the tutor** and clicking the **tutor’s** name.
* A **student** can **view** **their check-in / check-out history**:
  + Check-in time, check-out time, tutor, course
* A **student** can **view their stats** (statistics of how often they go to tutors for each class and how often they go to each tutor).
* A **student** can **send messages** to **tutors**.
* A **student** can **send messages** to **students.**
* A **student** can **view tutor hours**.
* A **student** can **view tutor rating.**
* A **student** can **view tutor reviews.**
* A **student** can **rate tutor performance.**
* A **student** can **write tutor review**.

*Tutor Privileges*

* A **tutor** can alter their **tutor data** (schedule, course list).
* A **tutor** can **clock in**
* A **tutor** can **clock out**
* A **tutor** can **view most recent students.**
* A **tutor** can **search for students** by **keyword.**
* A **tutor** canadd **student** to **regular students list.**
* A **tutor** can **check-in a student** by **scanning student QR Code**.
* A **tutor** can **check-in a student** by **typing in their email**.
* A **tutor** can **check-out** **a student** that has been **checked-in**.
* A **tutor** can **view the check-in / check-out** records of their students.
* A **tutor** can **view their clock-in / clock-out** records.
* A **tutor** can **view stats** in respect to courses, student, and student-year.
* A **tutor** can **send messages** to **students**.
* A **tutor** can **send messages** to **tutors.**
* A **tutor** can **write notes about a student** for other **tutors**.
* A **tutor** can **view notes** written about a **student** by other **tutors**.

*Admin Privileges*

* An **admin** can **create tutor groups**.
* An **admin** can **delete tutor groups**.
* An **admin** can **send invites to tutors** to invite them to a **tutor group**.
* An **admin** can **lock** a **tutor’s** account at any time.
* An **admin** can **delete** a **tutor’s** account at any time.
* An **admin** can **view tutor activity** (clock in, clock out, check-in, check-out, tutor stats).
* An **admin** can **view overall tutor stats** which show the aggregate for all tutor stats.
* An **admin** can **view tutor ratings**.
* An **admin** can **view tutor reviews**.
* An **admin** can **view tutor notes** on **students**.

**Design Goals**

* **Easy and convenient Check-In** – The first thing students and tutors should see when they log in are their check-in options.
* **Easy and convenient Clock-In** – For tutors, before they can check-in a student, the emphasis should be on their ability to clock-in.