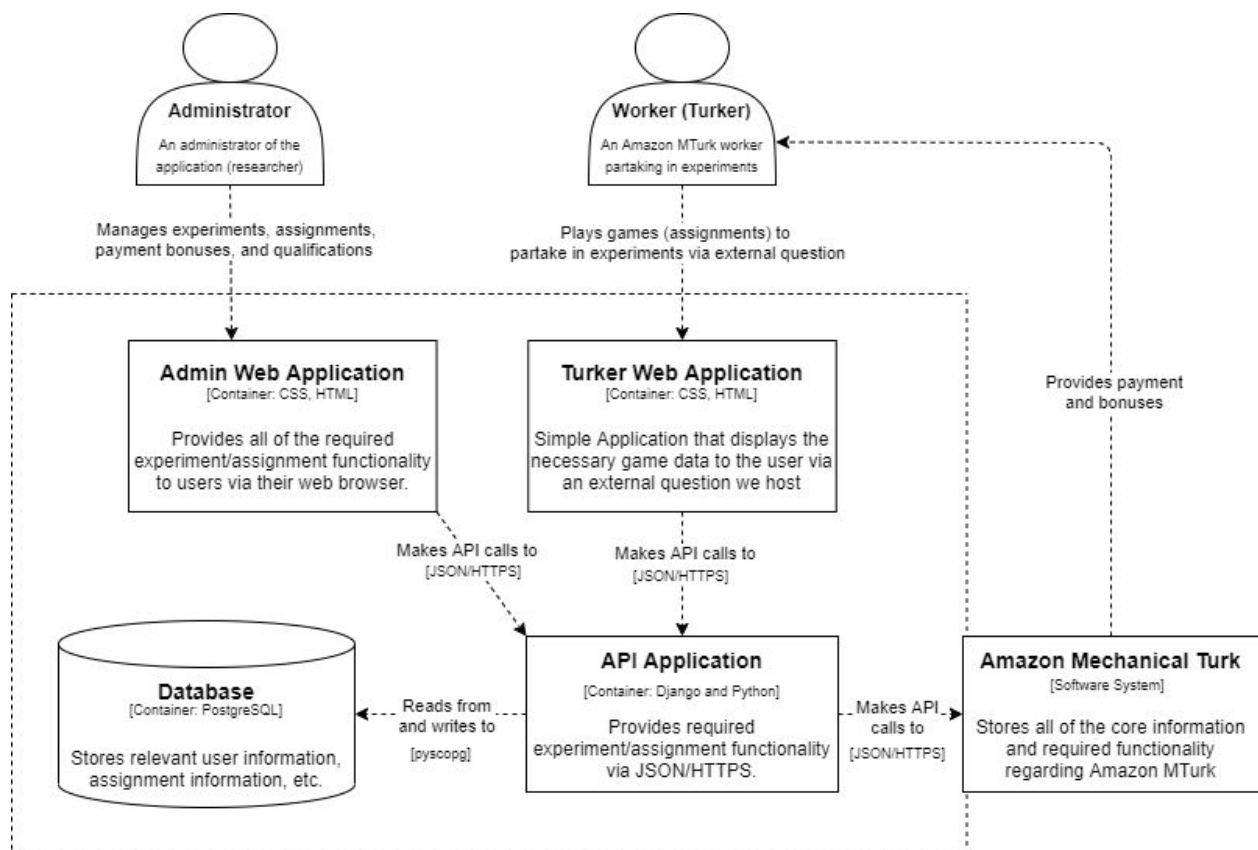# MTurk Framework Design Document

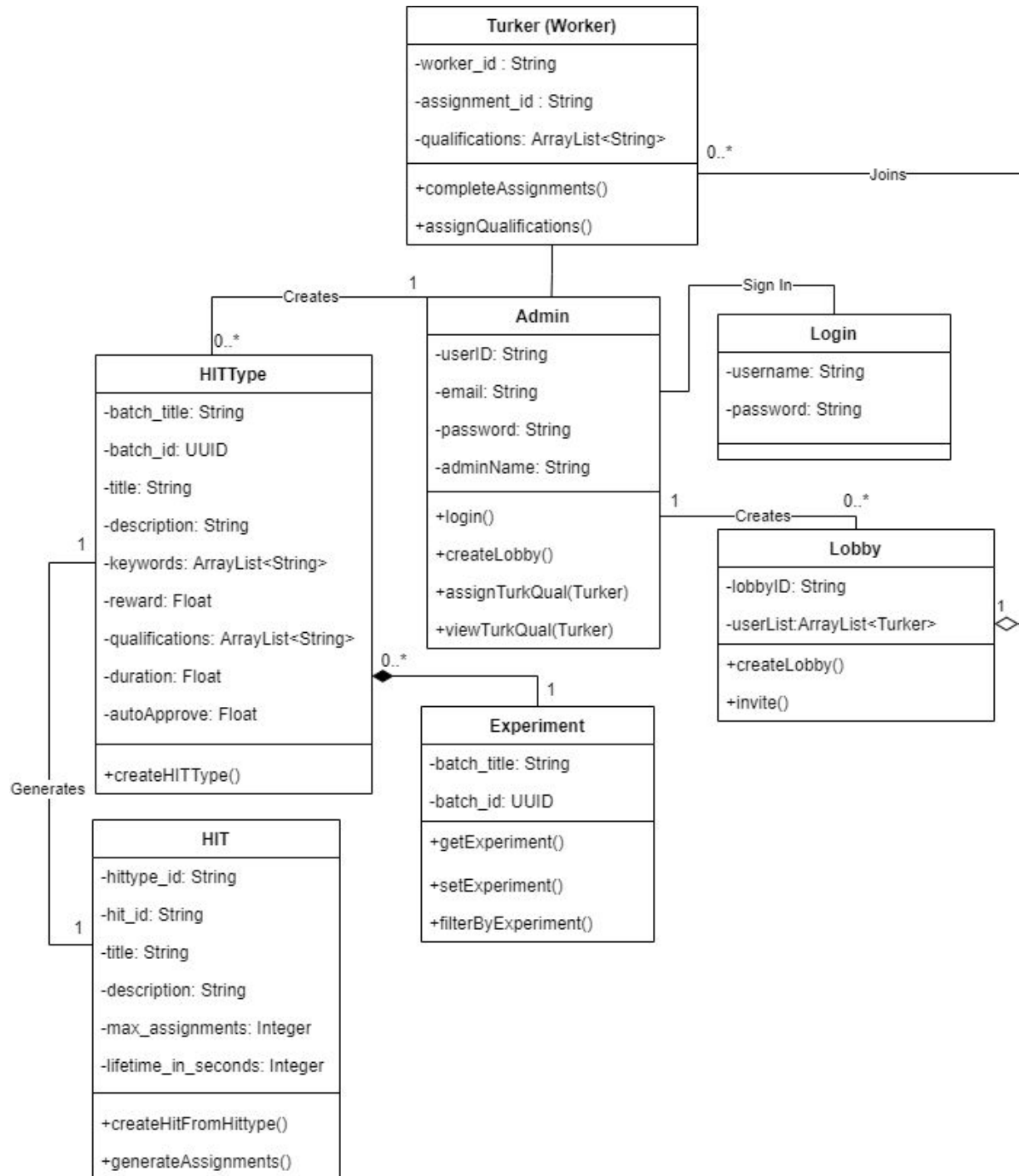By **Akshat, Jay, Jonathan, Muhammad, Walker, Xinjian**

February 6, 2021

## High-Level Architecture

This is an architectural diagram that defines all the program components that we will use to make our application.

# Major Data Elements

The UML class diagram lays out all the major data elements and their relationships that we expect to include in our framework.

# Interaction Scenarios

**Login**:
- Administrator: User of our application.
- WebSite: The Webpage that the user can view.
- WebServer: the server on which our application is running
- Database: Database that has the login information about all the users of our application.
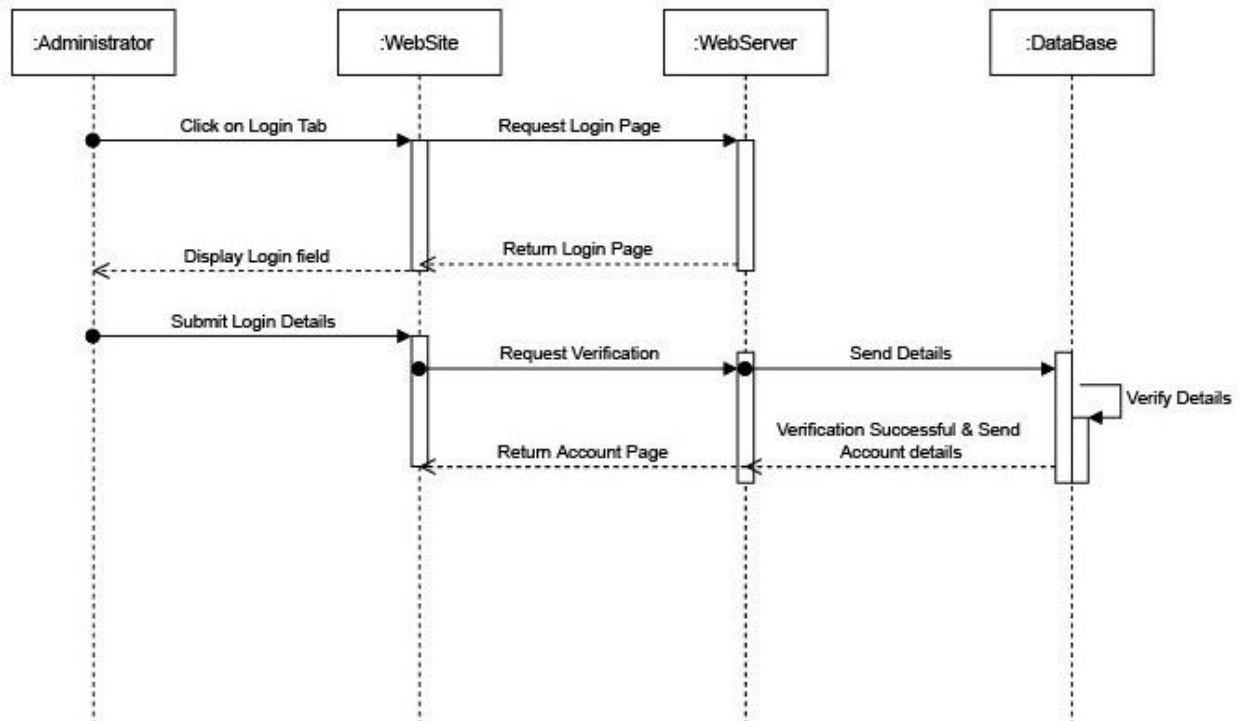
**Create HITType**:

- Administrator: User of our application.
- UI: The Webpage & WebServer that the user can view.
- Services: Includes the Mturk API that is used to provide the create HITType endpoint
- Database: Database that stores all the details the administrator enters on the page about the HITType
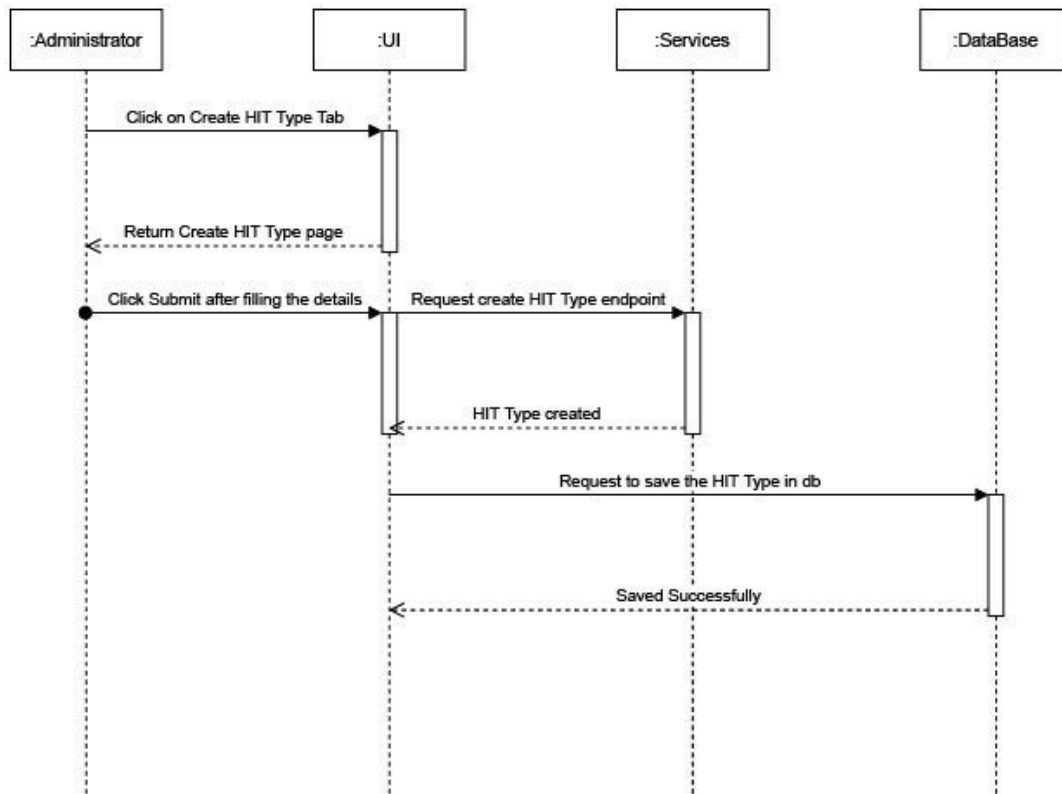
**Create HIT**:
- Administrator: User of our application.
- UI: The Webpage & WebServer that the user can view.
- Services: Includes the Mturk API that is used to provide the create HIT from HITType endpoint.
- Database: Database that has the details about the HITType created by the User is used to provide details about it to create the HIT and then the HIT along with its details are saved in the database.
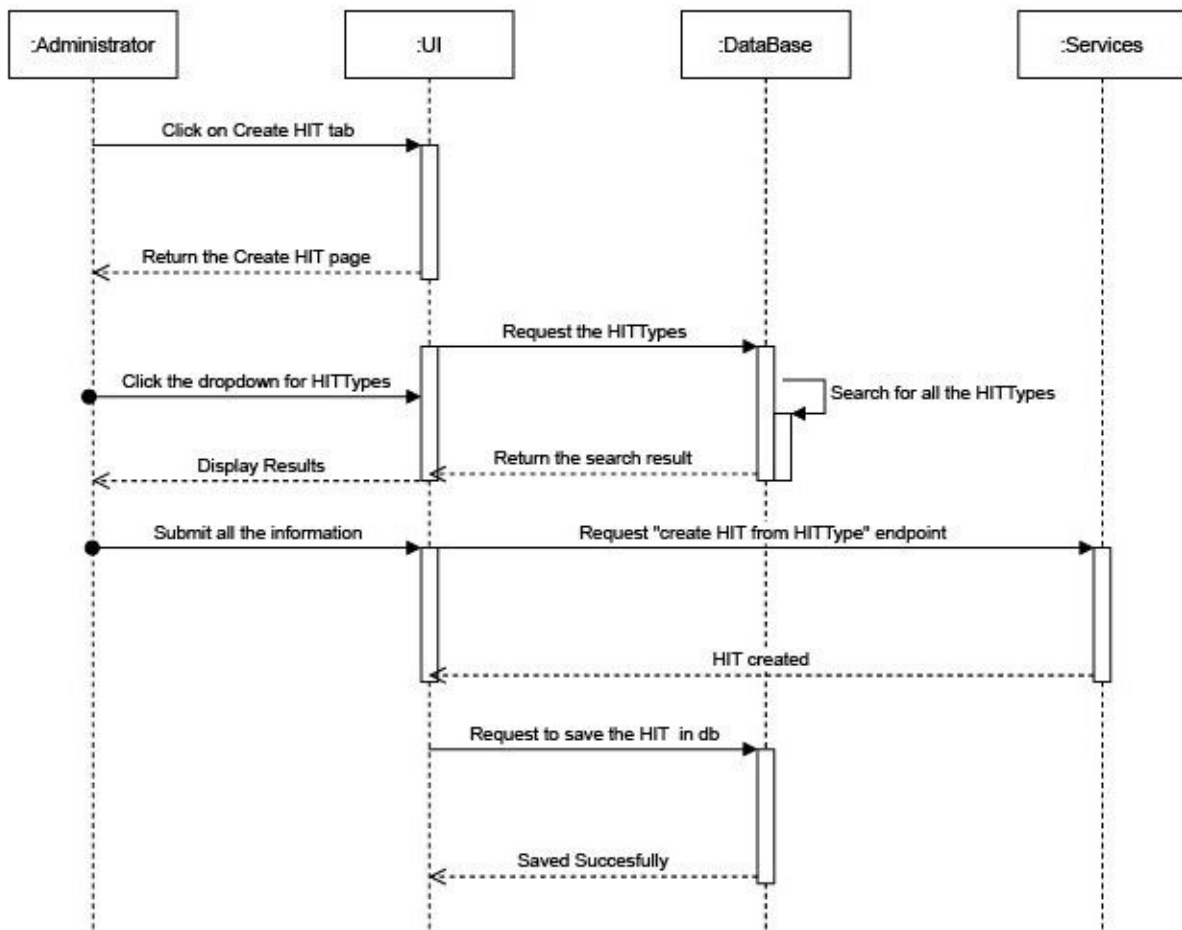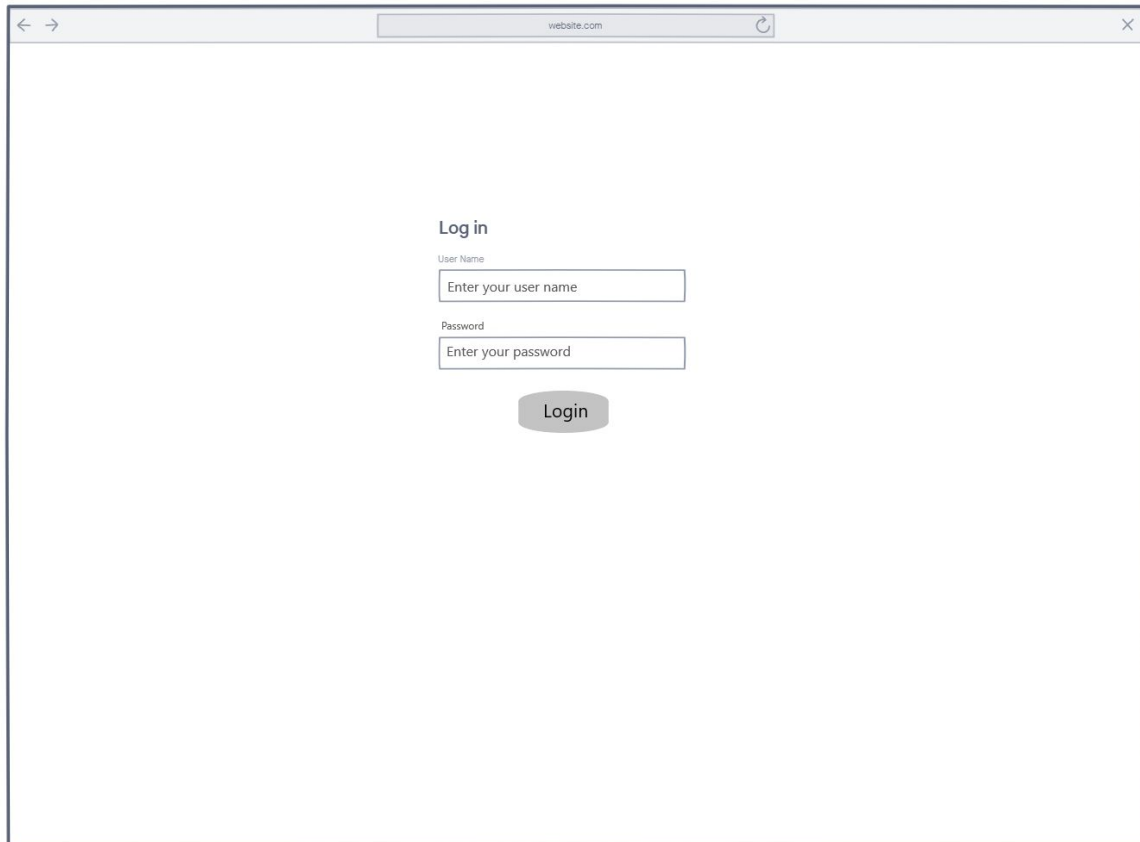
**Do HIT**:
- Turker: User of AWS Services who will view our public facing web page to do the assignment.
- AWS: Amazon Mechanical Turk ( Amazon web services )
- MTurk App: Our application that would provide the redirection details about the public facing web page that will have the assignment related to the HIT. It will also calculate bonuses if there is any and provide the payment to the AWS account of the User
- Database: Database that stores all the details the HIT and assignment that the Turker did on the Public facing web page, so that the administrator can review the progress of the HITs.
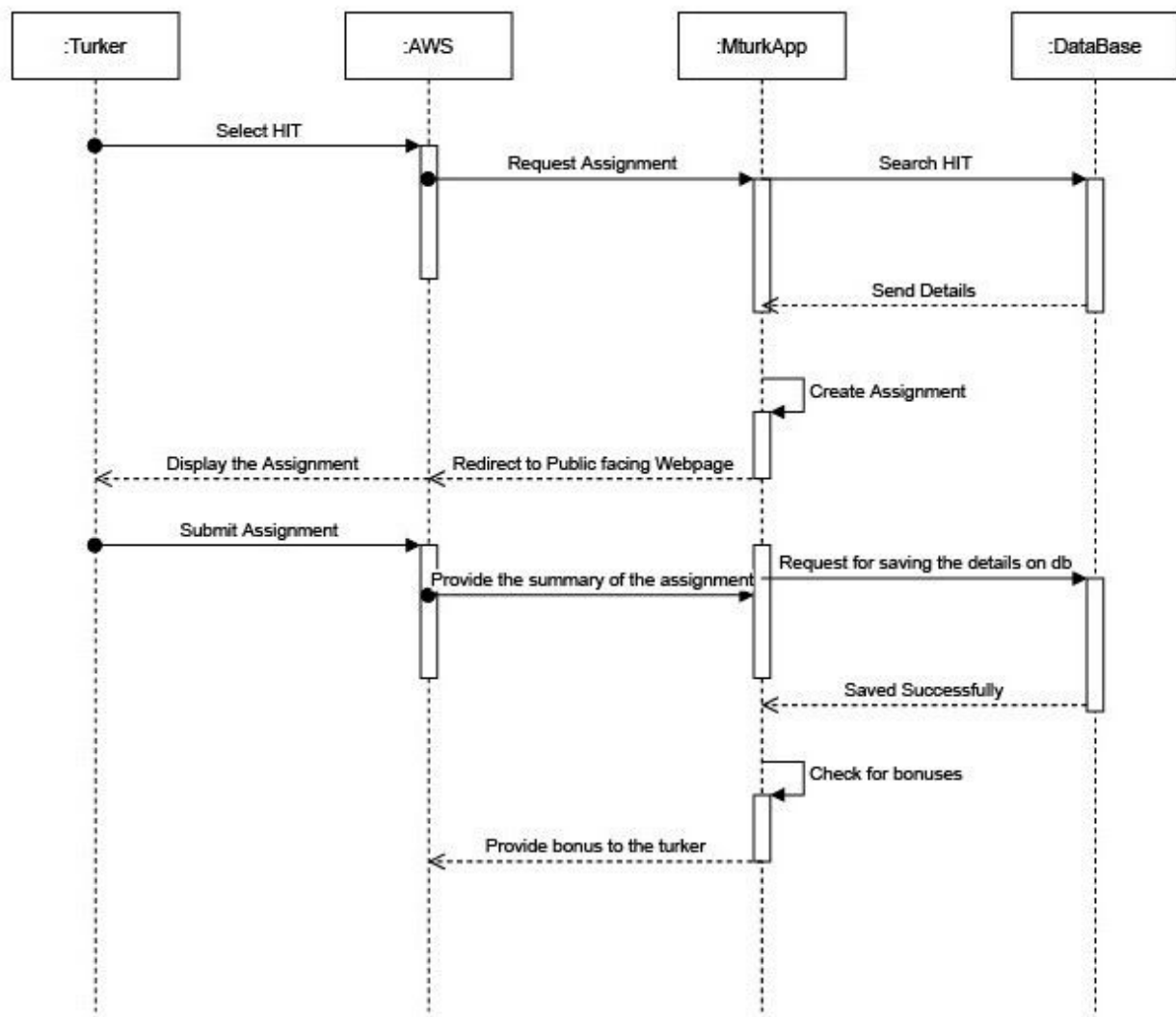
# Low-Fidelity User Interface

**This interface is the basic design of the login page.**

This interface encapsulates the functionality described in User Stories: *MH1*

**This interface is the basic design for the assignments page.**

This interface encapsulates the functionality described in User Stories: *MH2, MH6, MH7, MH10, SH4, SH5, CH1, CH2, WL1*

**This interface is the basic design for the Lobby page.**

This interface encapsulates the functionality described in User Stories: *SH2, SH3*

**This interface is where you can manage qualifications for Turkers.**

This interface encapsulates the functionality described in User Stories: *MH8, MH9*
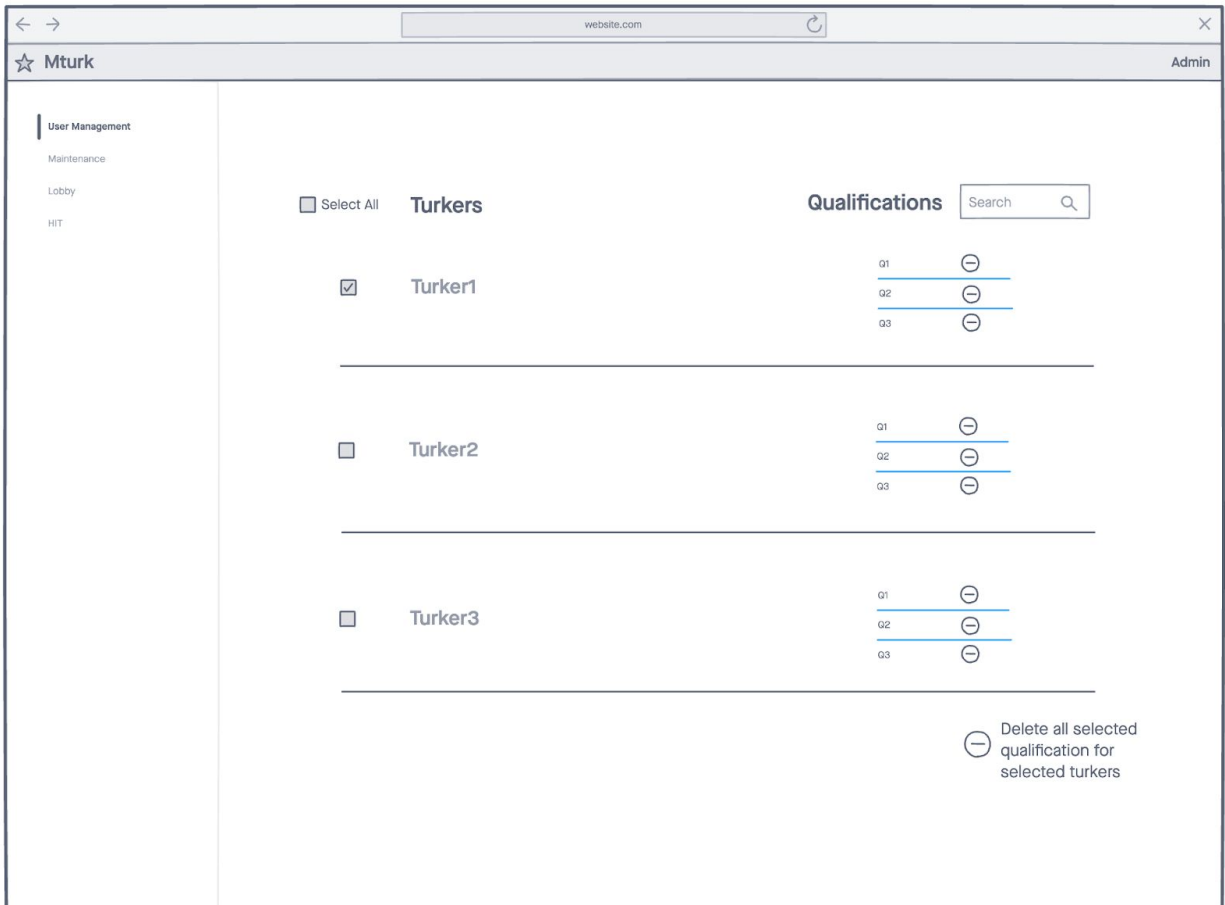
**This interface is where you can manage HITs/HITTypes.**

This interface encapsulates the functionality described in User Stories: *MH3, MH4, MH5*