

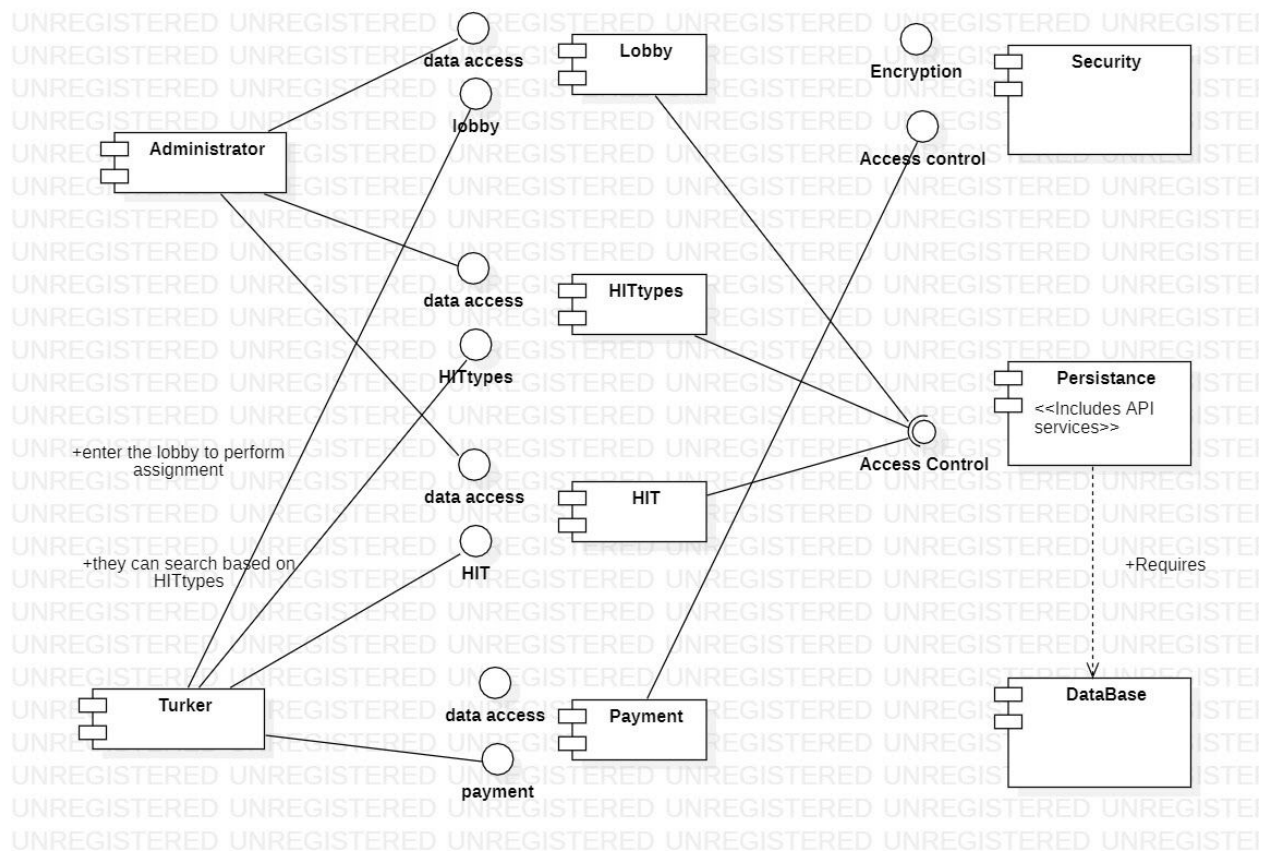
# MTurk Framework Design Document

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

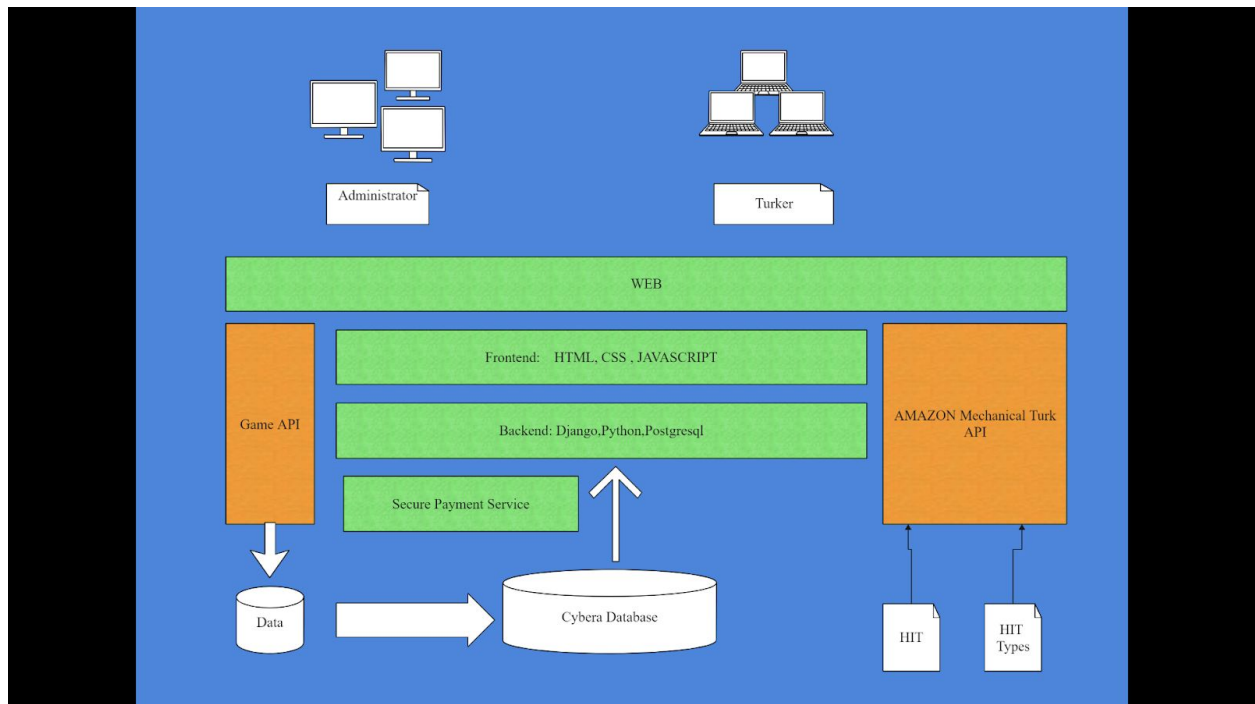
February 6, 2021

## High-Level Architecture

This is a component diagram to include the working of the 4 important components in our application. This shows who has the data access to the 4 components and who is just a user.

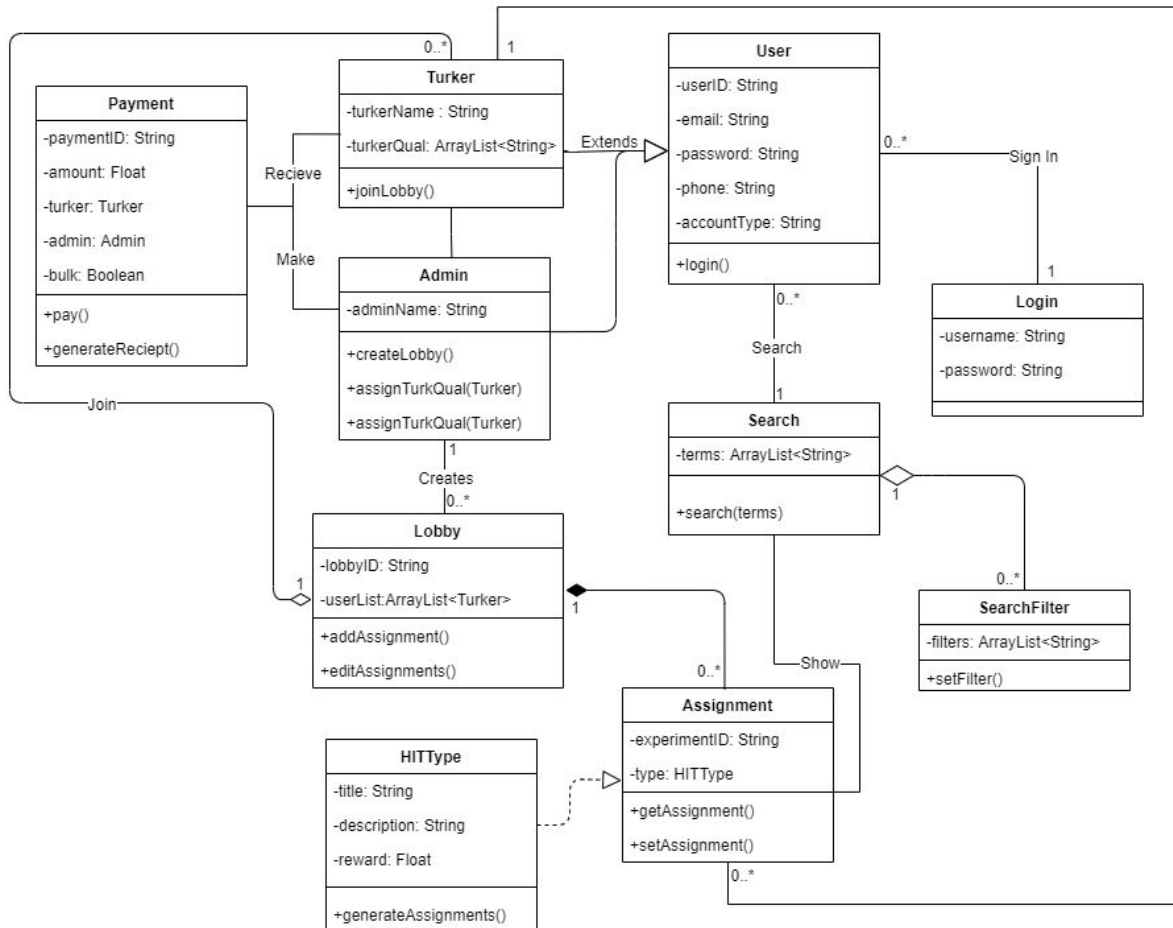


This is an architecture diagram that defines all the programm components that we will use to make our application.



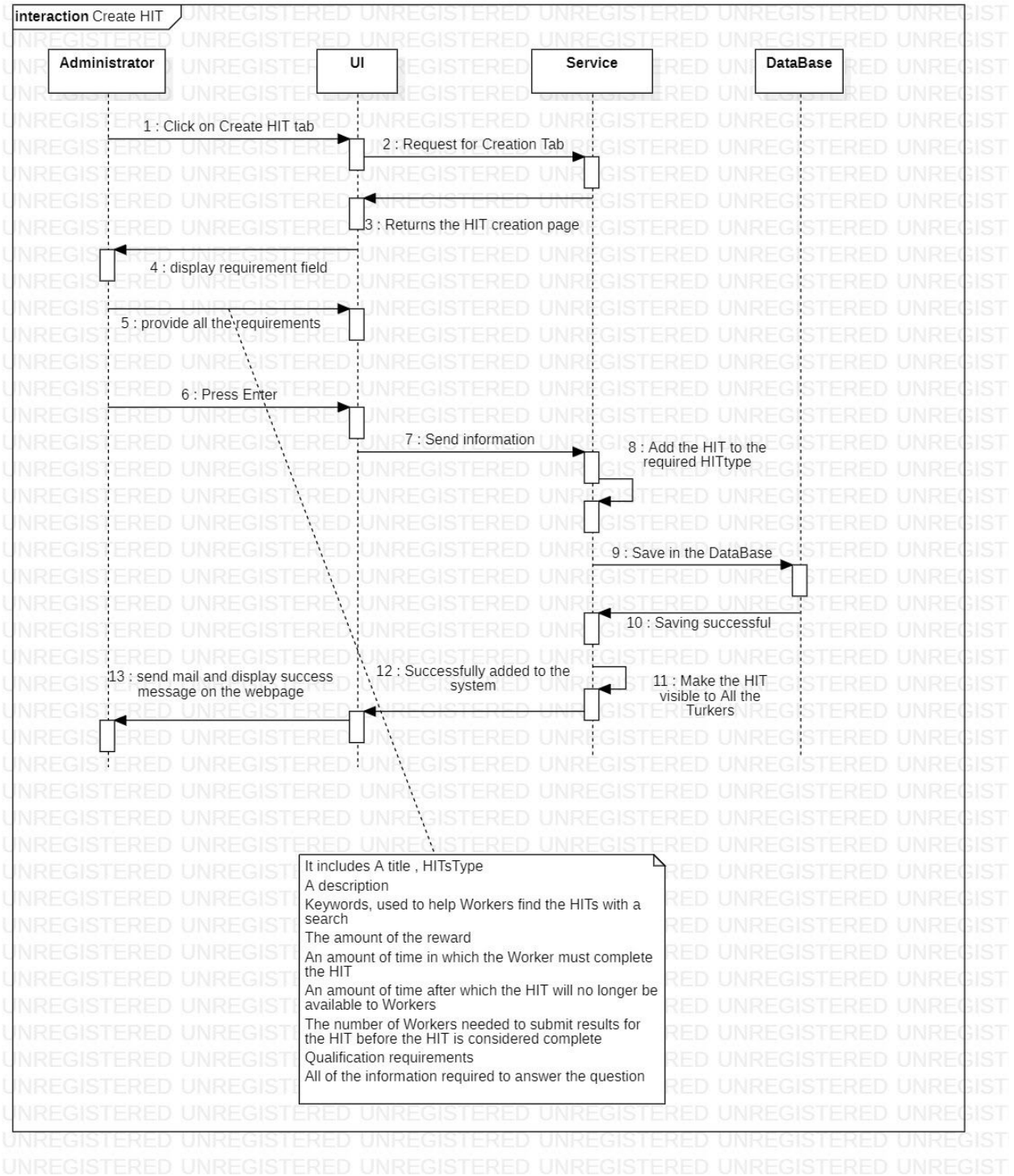
## Major Data Elements

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

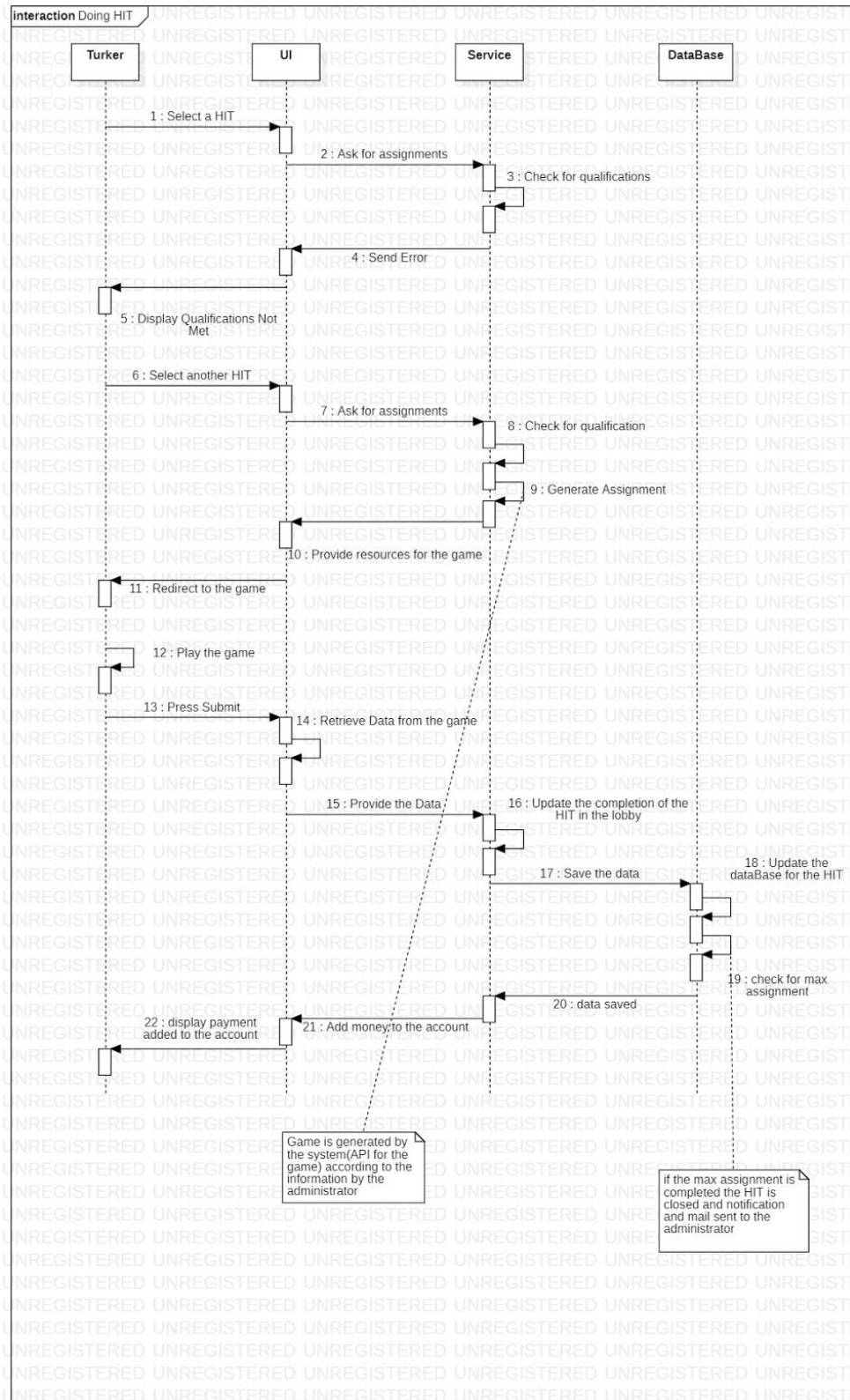


# Interaction Scenarios

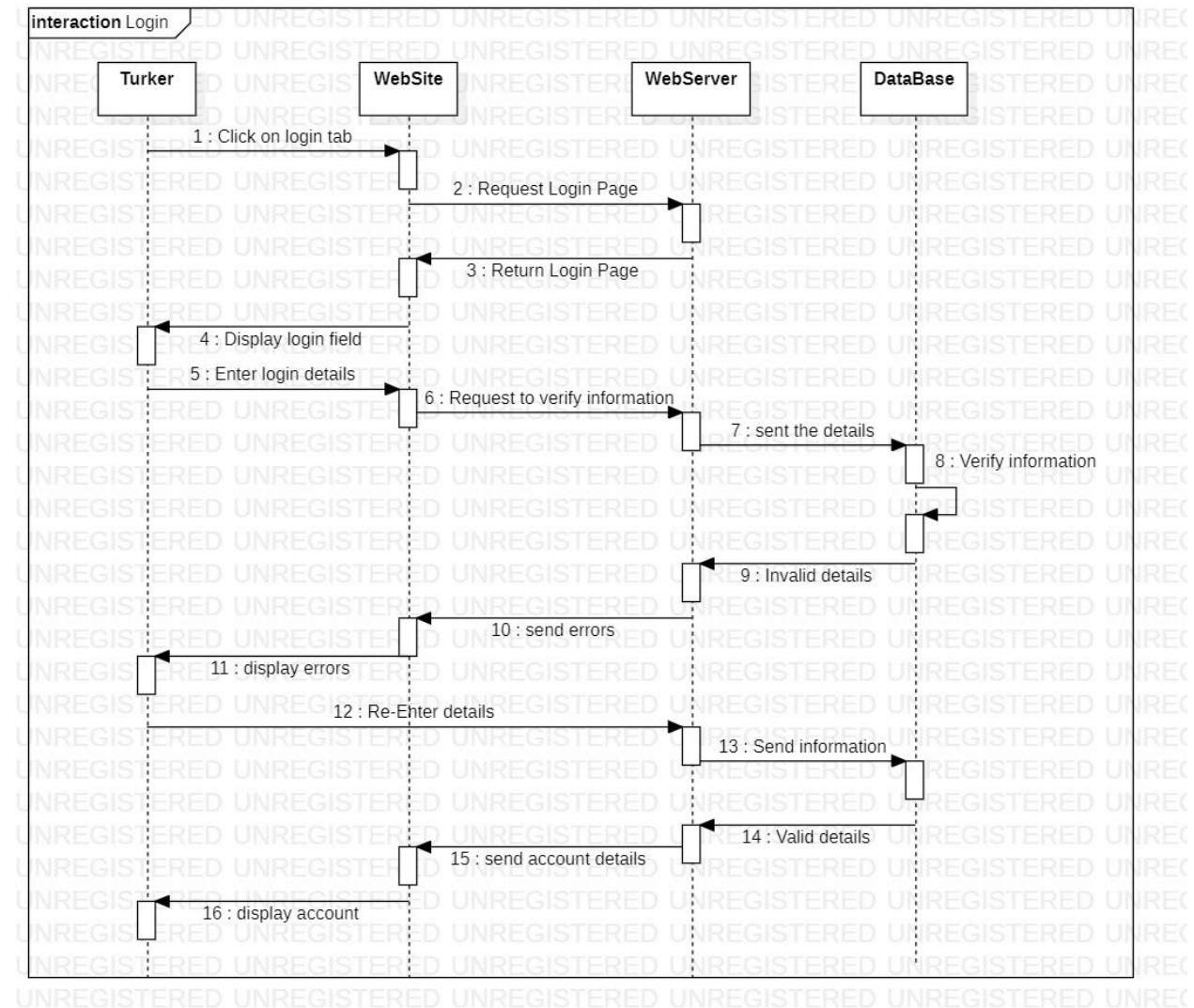
**Create HIT:** This diagram shows the interaction between administrator, UI, and the services server (includes the API) which takes place when the administrator creates HIT.



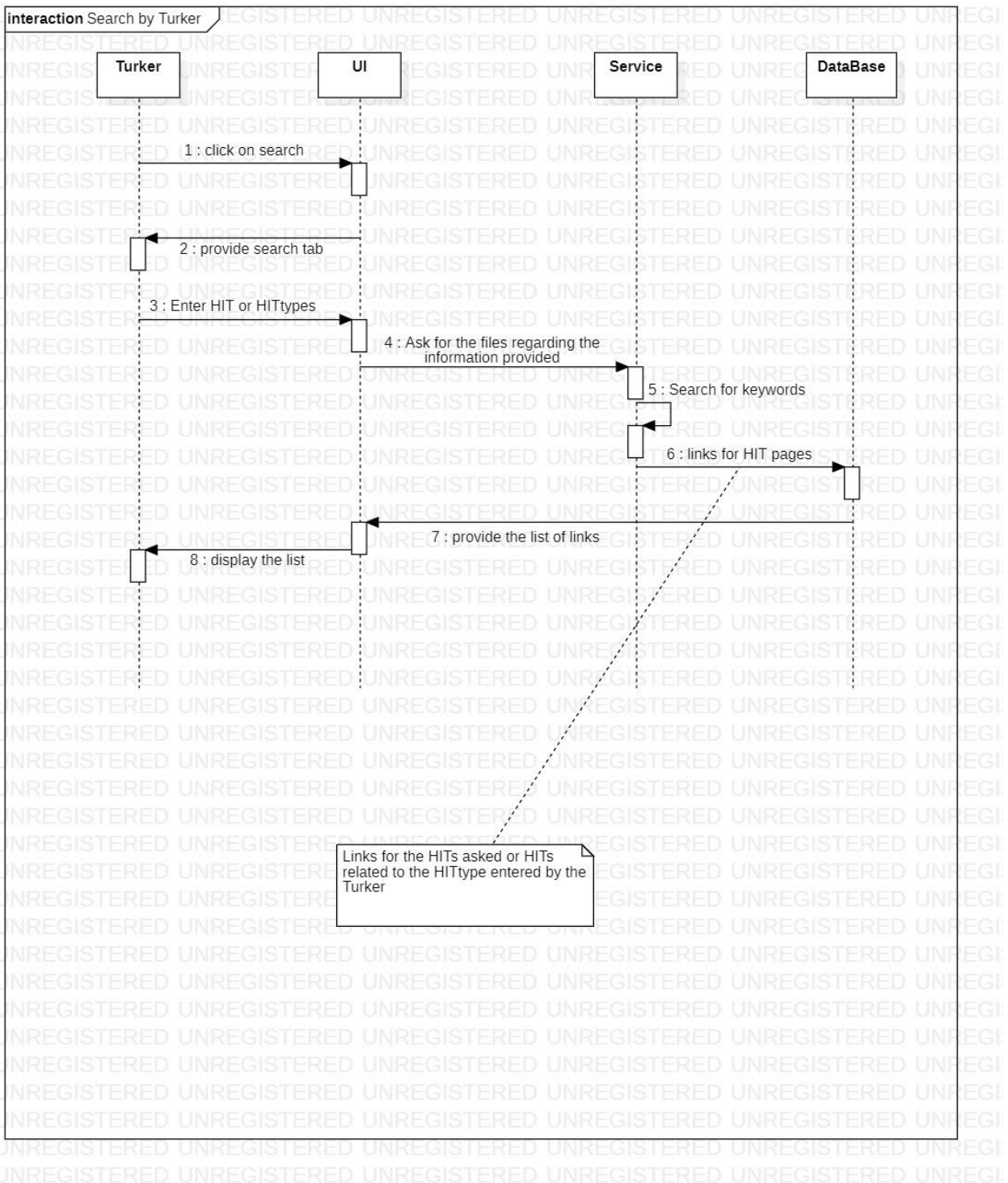
**Doing HIT:** This diagram shows the interaction between Turkers and services (including the API). The UI serves as an intermediate when the Turker decides to do a HIT.



**Search HIT:** This diagram shows the interaction between Turker and Services (including the API). The UI acts as an intermediate when a Turker searches for HIT or search based on HITtypes.

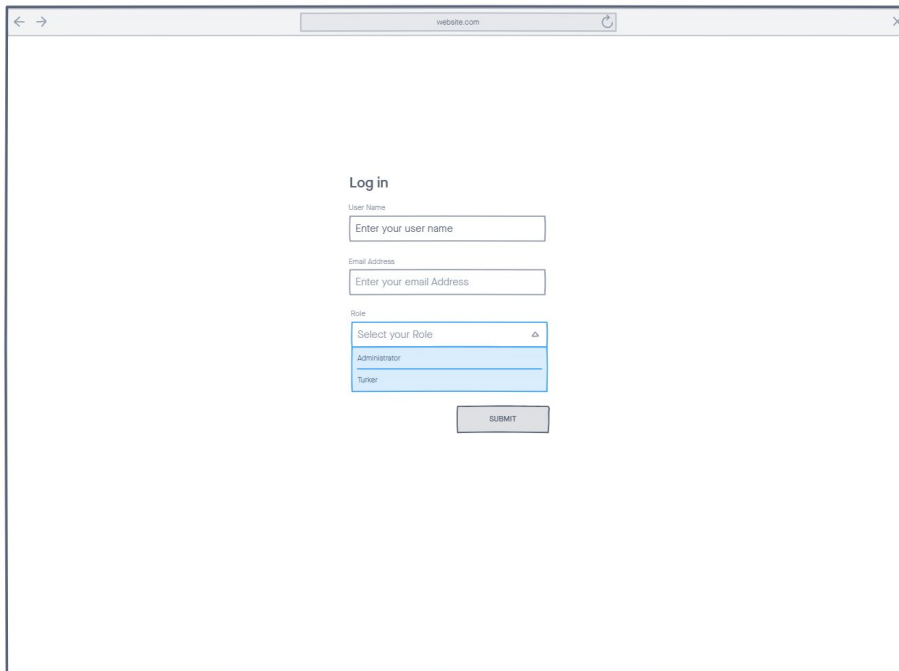


**Login:** This diagram shows the interaction that takes place when administrator/Turker logs into the application.



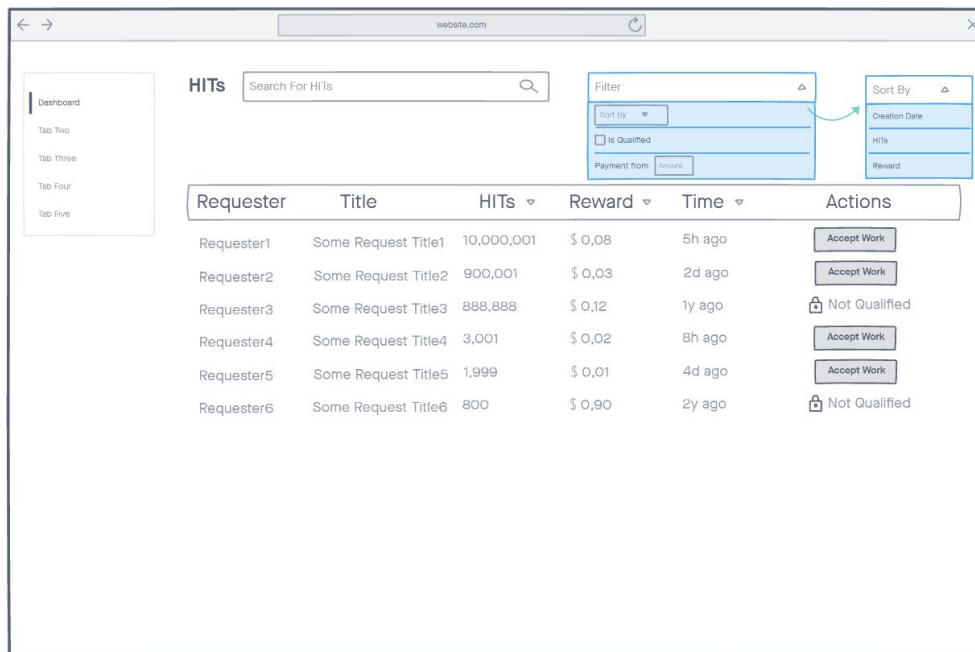
# Low-Fidelity User Interface

This interface is the basic design of the login page.



A low-fidelity login page design within a browser window. The page has a title "Log in". Below the title are three input fields: "User Name" with placeholder text "Enter your user name", "Email Address" with placeholder text "Enter your email Address", and a "Role" dropdown menu with "Select your Role" and options "Administrator" and "Turner". Below these fields is a "SUBMIT" button.

This interface is the basic design of the Dashboard page.

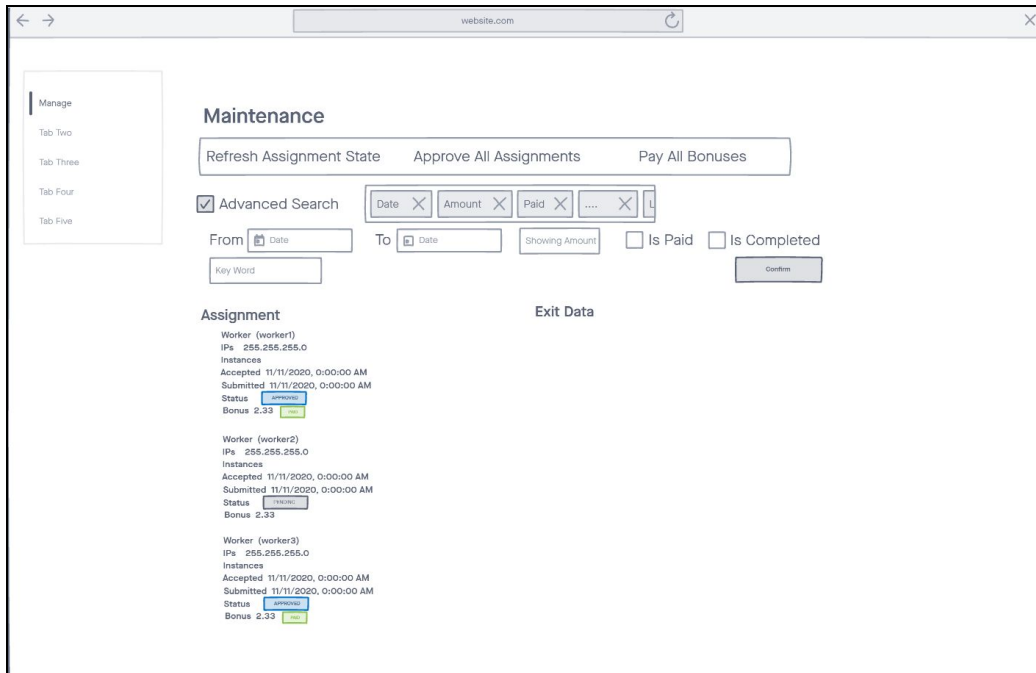


A low-fidelity dashboard page design within a browser window. The page has a sidebar with "Dashboard" and tabs "Tab Two", "Tab Three", "Tab Four", and "Tab Five". The main content area has a "HITS" section with a search bar "Search For HITS". To the right of the search bar is a "Filter" dropdown menu with "Sort by" and "is Qualified" options. To the right of the filter is a "Sort By" dropdown menu with "Creation Date", "HITS", and "Reward" options. Below these is a table with columns "Requester", "Title", "HITS", "Reward", "Time", and "Actions". The table contains 6 rows of data. The "Actions" column has buttons "Accept Work" or "Not Qualified" for each row.

Requester	Title	HITS	Reward	Time	Actions
Requester1	Some Request Title1	10,000,001	\$ 0,08	5h ago	Accept Work
Requester2	Some Request Title2	900,001	\$ 0,03	2d ago	Accept Work
Requester3	Some Request Title3	888,888	\$ 0,12	1y ago	Not Qualified
Requester4	Some Request Title4	3,001	\$ 0,02	8h ago	Accept Work
Requester5	Some Request Title5	1,999	\$ 0,01	4d ago	Accept Work
Requester6	Some Request Title6	800	\$ 0,90	2y ago	Not Qualified



This interface is the basic design for the maintenance page.



The Maintenance page interface includes a sidebar with a 'Manage' section and tabs for 'Tab Two', 'Tab Three', 'Tab Four', and 'Tab Five'. The main content area is titled 'Maintenance' and features three action buttons: 'Refresh Assignment State', 'Approve All Assignments', and 'Pay All Bonuses'. Below these is an 'Advanced Search' section with a checked checkbox and several filters: 'Date', 'Amount', 'Paid', and a dropdown menu. There are also input fields for 'From' and 'To' dates, a 'Showing Amount' field, and checkboxes for 'Is Paid' and 'Is Completed'. A 'Key Word' input field and a 'Confirm' button are also present. The 'Assignment' section lists three workers (worker1, worker2, worker3) with their respective IP addresses, instance counts, acceptance and submission timestamps, status (pending or approved), and bonus amounts. An 'Exit Data' button is located to the right of the assignment list.

Manage

Tab Two

Tab Three

Tab Four

Tab Five

### Maintenance

Refresh Assignment State Approve All Assignments Pay All Bonuses

☒ Advanced Search

Date X Amount X Paid X ... X

From  To  Showing Amount ☐ Is Paid ☐ Is Completed

Key Word

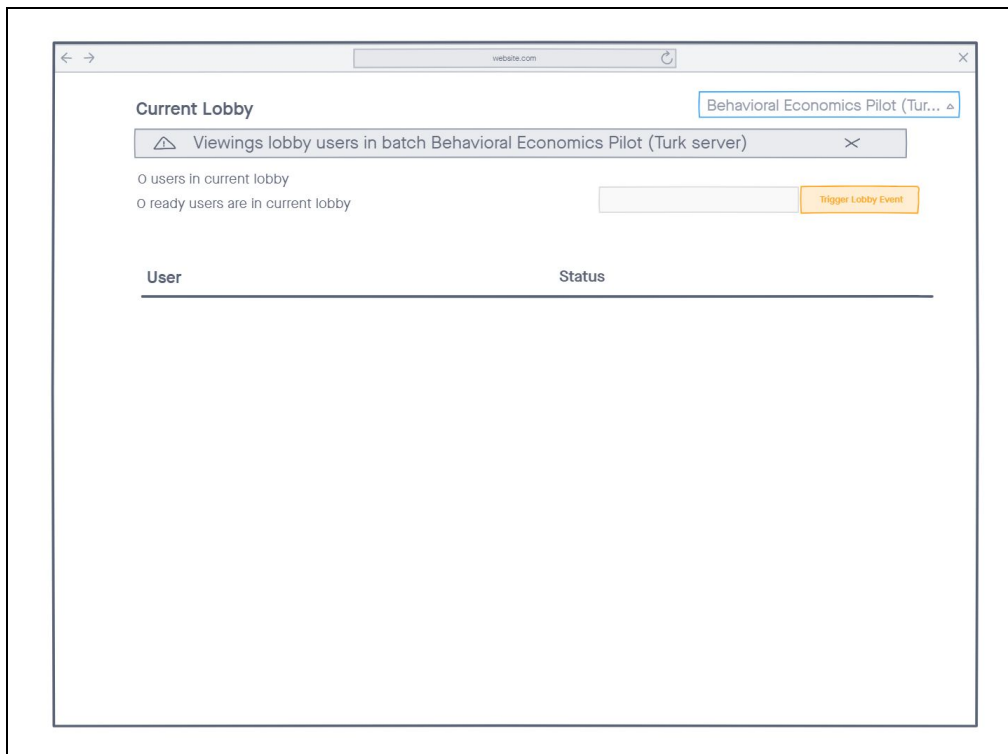
#### Assignment

Worker (worker1)  
IPs 255.255.255.0  
Instances  
Accepted 11/11/2020, 0:00:00 AM  
Submitted 11/11/2020, 0:00:00 AM  
Status   
Bonus 2.33

Worker (worker2)  
IPs 255.255.255.0  
Instances  
Accepted 11/11/2020, 0:00:00 AM  
Submitted 11/11/2020, 0:00:00 AM  
Status   
Bonus 2.33

Worker (worker3)  
IPs 255.255.255.0  
Instances  
Accepted 11/11/2020, 0:00:00 AM  
Submitted 11/11/2020, 0:00:00 AM  
Status   
Bonus 2.33

This interface is the basic design for the Lobby page.



The Lobby page interface shows a 'Current Lobby' section with a dropdown menu displaying 'Behavioral Economics Pilot (Turk...'. Below this is a button labeled 'Viewings lobby users in batch Behavioral Economics Pilot (Turk server)'. The page indicates '0 users in current lobby' and '0 ready users are in current lobby'. A 'Trigger Lobby Event' button is located next to the ready users count. At the bottom, there is a table with two columns: 'User' and 'Status'.

### Current Lobby

Behavioral Economics Pilot (Turk... ▾)

0 users in current lobby

0 ready users are in current lobby

User	Status
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