# **Team 3 Requirements**

#### MSCI 342 Homework 3 Part 2

By: Danial Betres, Victoria Li, Jason Wang, Ishani Adityan, Priyanka Brodie, Ayat Turar

### **Testing Sections**

Login

Cards

Transaction

Admin Login

Admin Navigation

Admin Export Page

Admin Card Set Page

Admin Cards

# **Functional Requirements**

#### Player Login: Danial Betres

Requirement Name: FUN-PLAYER-LOGIN-1

Requirement Description: The "login" button shall be disabled when the username input field

contains non-alphanumeric characters.

Requirement Name: FUN-PLAYER-LOGIN-2

Requirement Description: The "login" button shall be disabled when the username input field

is empty.

Requirement Name: FUN-PLAYER-LOGIN-3

Requirement Description: The "login" button shall be enabled when the user has inputted a

username that contains only alphanumeric characters.

Requirement Name: FUN-PLAYER-LOGIN-4

Requirement Description: The application shall redirect the user to a new page that displays

"loading" upon clicking the "login" button.

Requirement Name: FUN-PLAYER-LOGIN-5

Requirement Description: The application shall display a modal with instructional text about

the game when the "instructions" button is clicked.

Requirement Name: FUN-PLAYER-LOGIN-6

Requirement Description: The user shall be able to close the instruction modal by clicking on

either the top right x button or the "close" button.

Requirement Name: FUN-PLAYER-LOGIN-7

Requirement Description: An error shall be displayed on the main screen if the user tries to log

in with an already used username.

#### Cards: Priyanka Brodie

Requirement Name: FUN-CARDS-1

Requirement Description: Upon each user entering the game room, the application shall display

four cards on each user's page as part of the initial state of the game.

Requirement Name: FUN-CARDS-2

Requirement Description: The application shall display an image associated with a card for each

card the user has.

#### Transactions: Victoria Li

Requirement Name: FUN-TRANSACTION-1

Requirement Description: The user shall be able to accept or reject proposed trades

(transactions) by clicking on the accept-button or reject-button that appears on the card that has

been proposed.

Requirement Name: FUN-TRANSACTION-2

Requirement Description: The application shall remove the proposed card from the sender's

cCardset and into the recipient's card set if a transaction has been accepted.

Requirement Name: FUN-TRANSACTION-3

Requirement Description: The sender shall receive their card proposed for a transaction back

into their Cardset if a transaction has been rejected.

Requirement Name: FUN-TRANSACTION-4

Requirement Description: When a POST request is called to "request\_trade", The application shall return a 401 status error if at least one of card\_id, recipient\_id, sender\_id fields is NULL.

Requirement Name: FUN-TRANSACTION-5

Requirement Description: When a POST request is called to "request\_trade", The application

shall create a new Transaction row in the database if there is a card\_id, recipient\_id and

sender id.

Requirement Name: FUN-TRANSACTION-6

Requirement Description: The user shall be distributed with a set of cards in the most

objectively imbalanced state at the beginning of the game.

Requirement Name: FUN-TRANSACTION-7

Requirement Description: When a transaction is in progress, a request shall be sent to all

players to disabled them beginning a new transaction.

#### Admin Login: Jason Wang

Requirement Name: FUN-ADMIN-LOGIN-1

Requirement Description: The application shall display a text input field (text box) that allows

admin users to type in an admin username.

Requirement Name: FUN-ADMIN-LOGIN-2

Requirement Description: The application shall display a text input field (text box) that allows

admin users to type an admin password.

Requirement Name: FUN-ADMIN-LOGIN-3

Requirement Description: The application shall disable the "login" button if the username

input field is empty.

Requirement Name: FUN-ADMIN-LOGIN-4

Requirement Description: Only when the user has inputted text into the username and password input field, the application shall enable the "login" button to be clickable.

Requirement Name: FUN-ADMIN-LOGIN-5

Requirement Description: Upon submission of the admin login button when the proper

credentials are entered, the page should be redirected to the admin page.

Requirement Name: FUN-ADMIN-LOGIN-6:

Requirement Description: The user shall not be signed out of the admin portal upon refreshing

the page or after being redirected back to the main page from any other page.

#### Admin Navigation: Priyanka Brodie

Requirement Name: FUN-ADMIN-NAVIGATION-1

Requirement Description: The application shall display a navigation pane on the left-hand side of the page when the hamburger menu button is clicked on the admin "Add Cardset" and

"Export" pages.

Requirement Name: FUN-ADMIN-NAVIGATION-2

Requirement Description: The user shall be redirected to the "Export" page upon clicking on

the "Export" tab in the navigation pane on the "Add Cardset" page.

Requirement Name: FUN-ADMIN-NAVIGATION-3

Requirement Description: The user shall be redirected to the "Add Cardset" page upon clicking

on the "Cardset" tab in the navigation pane on the "Export" page.

#### Admin Export Page: Priyanka Brodie

Requirement Name: FUN-UI-ADMIN-EXPORT-1

Requirement Description: Upon clicking on the "Export Experiment Data" button on the Export page, the application shall download a CSV file containing data from the last experiment onto

the user's computer.

Requirement Name: FUN-ADMIN-EXPORT-2

Requirement Description: Upon clicking on the "Delete Experiment Data" button on the Export

page, the application shall clear the experiment data from the database.

#### Admin Export Page: Ishani Adityan

Requirement Name: FUN-ADMIN-EXPORT-3

Requirement Description: The CSV file containing data from the last experiment shall contain the following columns: Recipient\_ID, Sender\_ID, Card\_ID, Round\_ID, and Type (In-Progress,

Accepted, Rejected), and shall not be a null file.

#### Admin Card Set Page: Ayat Turar

Requirement Name: FUN-ADMIN-CARDSET-1

Requirement Description: The application shall save the input values and pictures to the corresponding 'Cardset' table in the database, once the user clicks the "Save cards" button.

Requirement Name: FUN-ADMIN-CARDSET-2

Requirement Description: The user shall be able to press the 'Cardset 1' tab on the Cardset Page

and be able to see a new page of 16 cards.

Requirement Name: FUN-ADMIN-CARDSET-3

Requirement Description: The user shall be able to navigate to the 'Cardset 2' tab on the Rounds

Page to access and input a new set of 16 cards.

Requirement Name: FUN-ADMIN-CARDSET-4

Requirement Description: The user shall be able to press the 'Cardset 3' tab on the Cardset Page

and be able to see a new page of 16 cards.

Requirement Name: FUN-ADMIN-CARDSET-5

Requirement Description: The user shall not be able to click "Save cards" button if any of the 16

cards are missing required fields.

Requirement Name: FUN-ADMIN-CARDSET-6

Requirement Description: The user shall be able to select a specific set of cards for one

experiment by clicking the 'Chose for Experiment' button.

Requirement Name: FUN-ADMIN-CARDSET-7

Requirement Description: The application shall indicate which specific 'Card Set' is being used for an experiment by displaying the 'Card Set (chosen number) - Being used in Experiment" on

the top right corner of the page.

#### Admin Cards: Ishani Adityan

Requirement Name: FUN-ADMIN-CARDS-1

Requirement Description: The application shall display two text input field that allows users to

type both 'primary' and 'secondary' values for each card in the card set.

Requirement Name: FUN-ADMIN-CARDS-2

Requirement Description: The application shall display a empty image box field that allows users to select an image from their computer to be inputted into the allotted image area.

Requirement Name: FUN-ADMIN-CARDS-3

Requirement Description: The application shall support the most updated action of the user;

replace a previously selected image by a new one or update a previous input value.

Requirement Name: FUN-ADMIN-CARDS-4

Requirement Description: The application shall indicate a missing input value by placing a "Required" text in red beside the 'primary' or 'secondary' values or image that needs to be filled.

Requirement Name: FUN-ADMIN-CARDS-5

Requirement Description: The user shall only be allowed to modify any of the input fields and

image upon clicking on the edit icon button.

Requirement Name: FUN-ADMIN-CARDS-6

Requirement Description: The application shall only allow image file types (ex: .jpg, .png) to be

uploaded to the image box.

## **Nonfunctional Requirements**

Requirement Name: NF-SCALABILITY-1: Priyanka Brodie

Requirement Description: The application shall be able to support four players at a single time.

Requirement Name: NF-PERFORMANCE-2: Victoria Li

Requirement Description: The application shall be able to provide real-time, event-based communication between the client and server using socket.io in order to complete an entire experiment without refreshing any player's web pages.

Requirement Name: NF-PERFORMANCE-3: Jason Wang

Requirement Description: When a player is involved in a transaction of either providing or receiving a card, the players are able to view the trade in real-time where a provided card appears in the respective trade bin associated to the other player.

Requirement Name: NF-SECURITY-4: Danial Betres

Requirement Description: The admin user shall require a username and a password containing at least 6 characters, with one capital and one number, to enter the admin page

Requirement Name: NF-CAPACITY-5 : Ishani Adityan

Requirement Description: The application shall prevent admin users from uploading image files that is more than 1MB for any of the 16 'Admin Cards'.

Requirement Name: NF-SECURITY-6: Ayat Turar

Requirement Description: The application shall require admin user to be successfully logged in in order to modify or view the current Admin cardsets.