Design Documentation – Paper, Rock, Scissors: Final
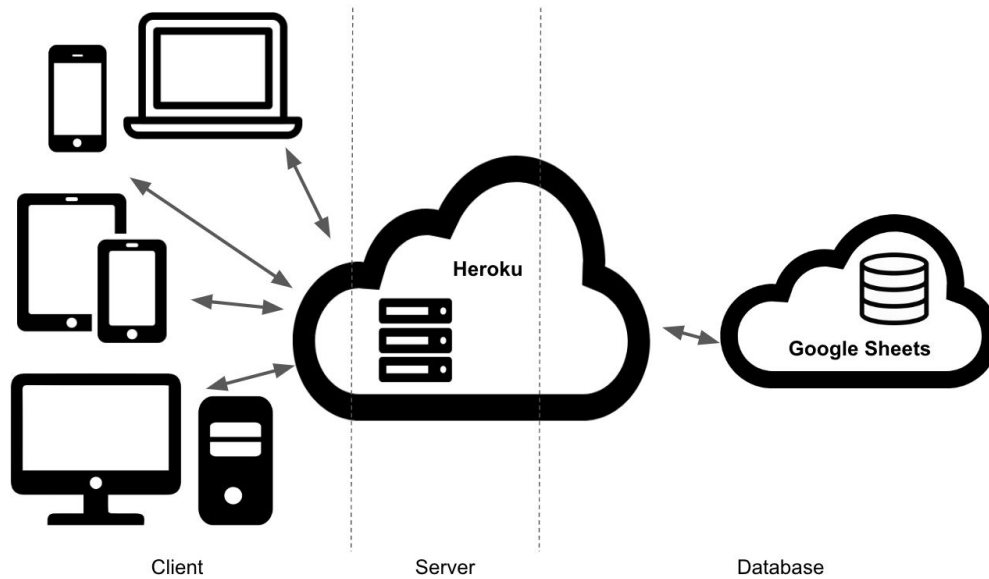
Software Engineering

1 Architectural Design
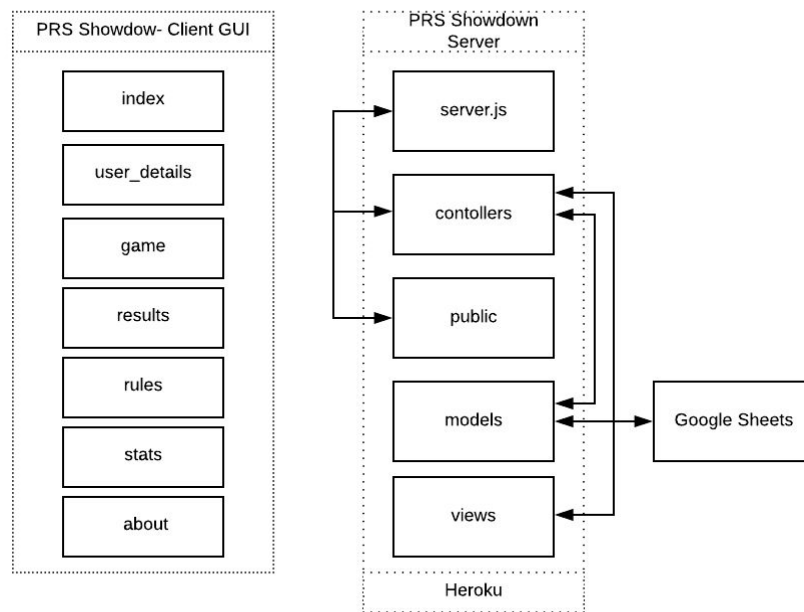
1.1 Overview

Our system design is the standard client-server architecture common in web apps. It consists of several high-level components:

- **Client**: Any HTML5-compliant web browser (via Bootstrap or Material Design)
- **Server**: Heroku
- **Database:** Google Sheets

2 Low Level Design
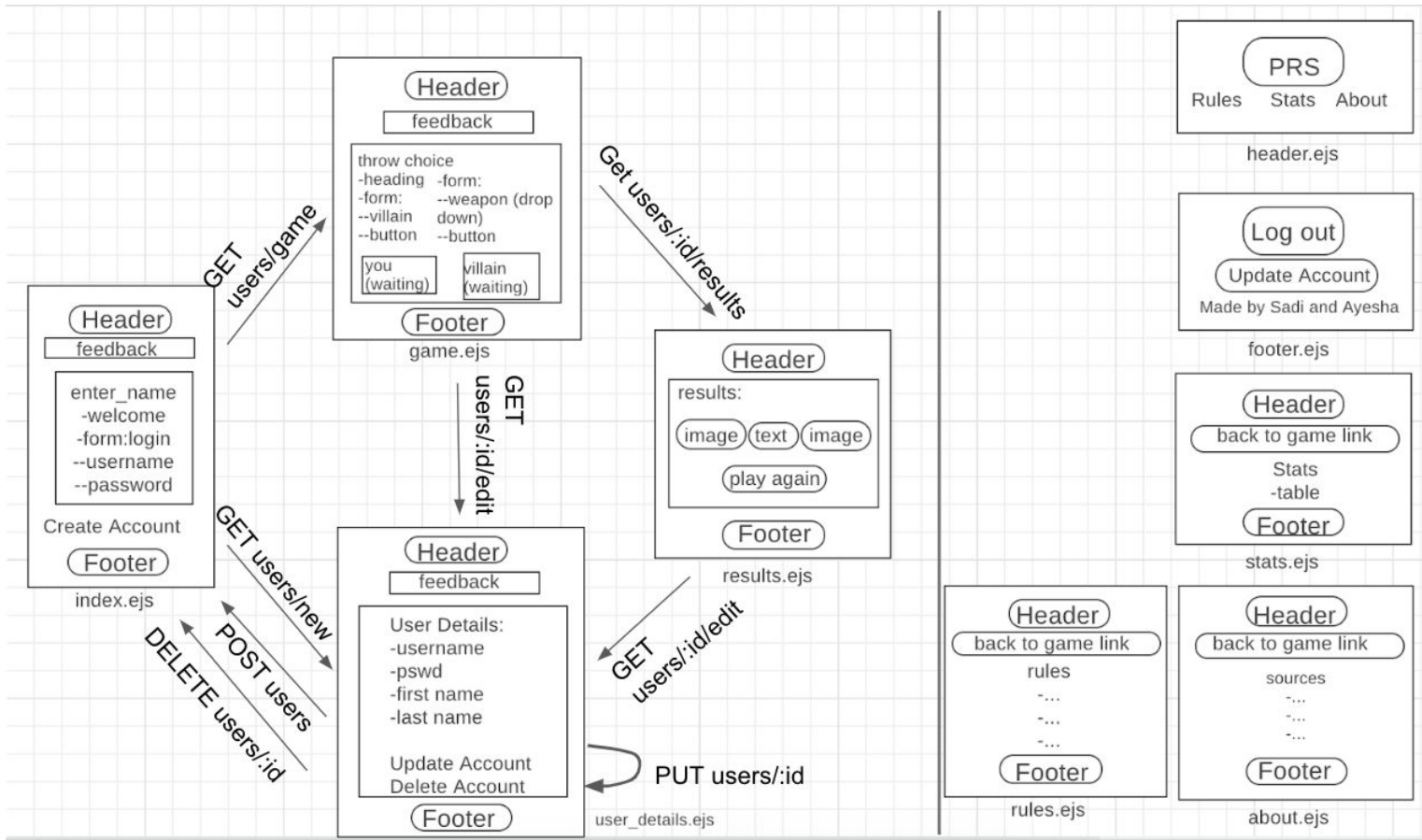
2.1 Component Diagram

2.2 Data Diagram

2.2.1 `villains.csv`

name	pswd	total	wins	losses	rock	paper	scissors	first	last	creation	update
sadi	hel	3	3	0	2	0	1	sadi	gulcelik		
andrew	ting	0	0	0	0	0	0	andrew	ting		
rifat	league	0	0	0	0	0	0	tyler	masuyama		
ayesha	helpp	26	12	7	11	5	10	Ayesha	Ali		

2.2.2 `users.csv`

name	total	wins	losses	rock	paper	scissors
Mickey	7	0	6	1	4	1
Regal	3	2	0	3	0	0
Harry	3	1	1	0	1	2
Comic_Hans	1	0	1	0	0	1
Manny	1	1	0	1	0	0
The_Boss	6	6	0	5	1	0
Mr_Modern	2	1	0	2	0	0
Pixie	2	0	1	0	1	1
Spock	2	1	1	1	0	1
Bones	0	0	0	0	0	0
The_Magician	0	0	0	0	0	0
Gato	4	2	0	2	1	1

3 Wireframe

4 Routing Table

4.1 server.js

HTTP ACTION	Route	Body	Result
GET	`/, /index`	n/a	`index.ejs`
GET	`/rules`	n/a	`rules.ejs`
GET	`/stats`	n/a	`stats.ejs`
GET	`/about`	n/a	`about.ejs`

4.1 controllers/users.js

HTTP ACTION	Route	Description	Body	Result
GET	`/user/new`	Show new user form	n/a	`user_details.ejs`, a blank form to input all required info for a user
POST	`/users`	Create a user	`user`	`index.ejs`, the login page
GET	`/users/:id/edit`	Show edit form for user with :id	n/a	`user_details.ejs`, a form pre populated with current user information, update button and delete button
PUT	`/users/:id`	Update user with :id	`user`	`user_details.ejs`, a form pre populated with current user information, update button and delete button, and feedback on update
DELETE	`/users/:id`	Delete user with :id	n/a	`index.ejs`, the login page
GET	`/users/game`	`username,password`	n/a	`game.ejs`
GET	`/user/:id/results`	Show the results of a match between user with :id and a particular villain	`weapon, villain_name`	`results.ejs`

5 Project Management

5.1 Group Member Tasks

Ayesha
- Controller
- user_details

Sadi
- Models
- Google sheets

Both
- mvc server
- The rest

5.2 Link to Heroku-hosted project

https://prs-sadi-ayesha.herokuapp.com/