

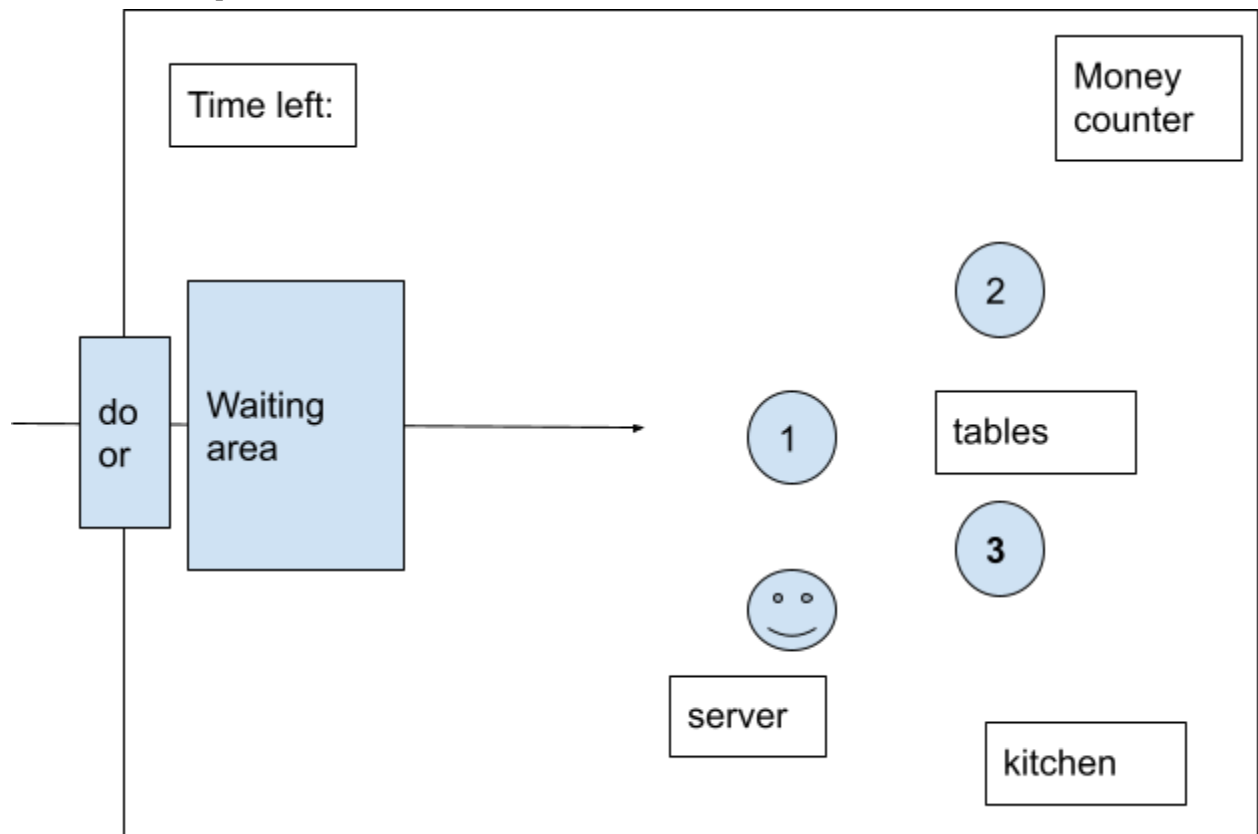
# Javascript Project Design Document

*Team Big Birds -- Cameron Nelson, William Chen, Alif Abdullah (PM), Sophie Liu*

File Tree:

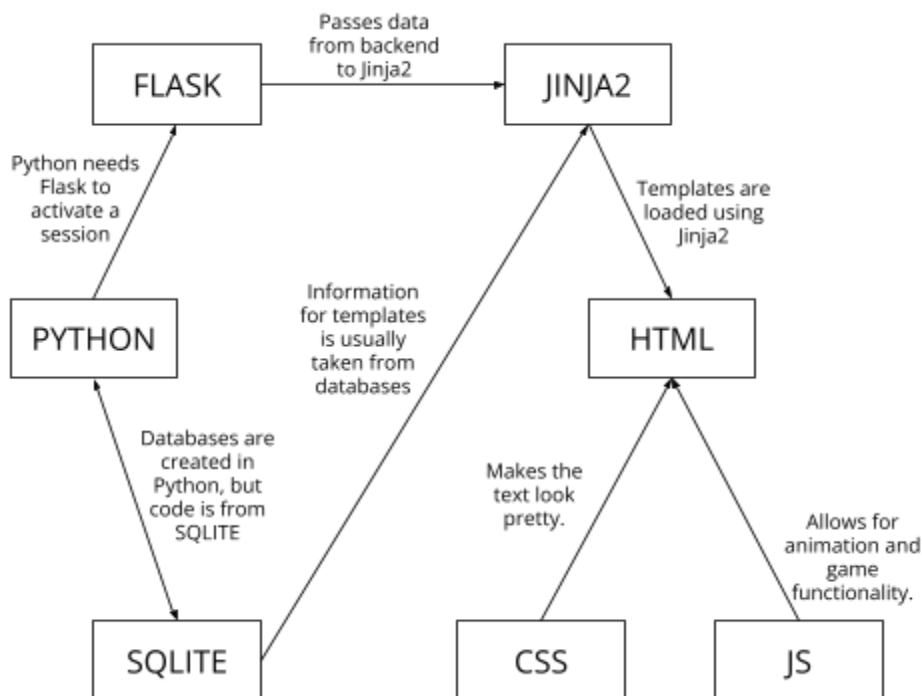
```
BigBirdsRevenge
├─ README.md
├─ devlog.txt
├─ flag.jpg
├─ app/
│   └─ __init__.py
│   └─ saves/
│   └─ templates/
│       └─ all.html
│       └─ login.html
│   └─ static/
│       └─ css/
│           └─ style.css
│       └─ js/
│           └─ save.js
```

Front-End Sitemap



## Program Component List:

- Python
  - Basic website functionality
    - Rendering templates, handling and sending requests to web pages, properly rerouting and redirecting to appropriate web pages, etc.
  - Accesses SQLite and Flask for login sessions.
- SQLite
  - We will use SQLite to store login information of our users
- Jinja
  - We will use Jinja for variables in our templates, to make our code more easily variable to suit the needs of our code.
- Flask
  - The lightweight web framework upon which we shall build our app
- Bootstrap/CSS
  - CSS makes our site look pretty to the user on the front end.
  - Bootstrap will make the task of making our site look prettier easier with its pre-built classes
- JavaScript
  - Enables us to perform animation and register and process mouse clicks, mouse overs, and other such events using canvas-JS interactions
  - Sends save data to server



## Database Organization

- Tables:

### 1. USERS

- a. Stores user data
- b. Holds username, password + ROWID

## Member Assignments

- Cameron: Working on backend stuff and database, also frontend
- Alif (PM): Using jinja/flask/python to connect backend to frontend stuff.
- Sophie: Mainly frontend stuff, such as the HTML and JS
- William: Working on game design and mechanics and assisting any other team member.

Project Name: Big Birds Revenge

## OUR PLAN:

Restaurant tycoon game?

Skeleton	Buttons Databases (account system for progress save) Figure out the money system
Skeleton pt2	Placeholder visuals
Presentable	Bell curve??? (set prices for things - expensive food means less people will buy it, cheap food will mean more people will buy it. Up to you to determine your profits) <ul style="list-style-type: none"><li>- Collision detection with tables and walls</li></ul> Takeout/Delivery
Extra	<ul style="list-style-type: none"><li>- Health and restaurant standard inspection</li><li>- Random Events (earthquake, inflation, wage strike, shifts in ingredients prices)</li><li>- Customers have a happiness/patience meter<ul style="list-style-type: none"><li>- The longer the wait, the lower their happiness becomes. At some point, they will leave if they wait long enough without getting a table</li><li>- The patience meter corresponds directly to the amount of tips customers give</li></ul></li><li>- You can advertise your restaurant<ul style="list-style-type: none"><li>- Costs money, but might get you more customers</li></ul></li><li>- You have a set number of menu items. (For example, you can make 17 recipes, but you can only put 5 of them on the menu at a time)<ul style="list-style-type: none"><li>- Furthermore, some recipes might be popular, while others might not be so</li><li>- You get the option to premake some of the dishes.</li><li>- Each dish you make costs you money. However, depending on the popularity (or lack thereof) for some dishes, you could end up having some dishes not be purchased, while having others be purchased in great quantities</li></ul></li><li>- Monopolize other restaurants? (Have a button you click to switch to different restaurants or passive income through franchising)</li></ul>

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Basic variables:

- Inventory
  - Menu items
  - Construction Materials
- **Money**
- Max customer number?
  - Based on upgrades
- Upgrades
  - Advertisements
  - Bigger Restaurant
  - More tables
  - More menu items
  - Better chef
  - More servers

Game Design:

- Top-down Game
- Placeable furniture
- Grid system for placement and human (customers and servers) pathing.
- Food is instantly cooked for simplicity. Time delay later
- Tables will be stored in an array and will have an array of values for if it is occupied if orders were taken, etc.
- Customers need to go to a table. They will go to tables based on the order of existence for now. Will add “closest table” pathing later.
- The server can take food from the kitchen and move it to the customers
- Interactivity with the game (to make it less of a sim game) can be added later

Ship Date: March 28th, 2022