Platformer with	Get more used to	Create a platformer game using JavaScript and HTML
Physics	Canvases and with	Canvases as well as a simple physics engine for it
	writing out more	(velocity, acceleration, collisions,)
	detailed physics	
	systems for them.	

### **PROJECT TIMELINE:**

**5/26:** Setup basic canvas with buttons for high score tables.

Setup login and registration.

Add simple character that can be moved left and right.

**5/28:** Add platforms.

Setup databases for high scores collection and storage.

Add javascript for high score buttons.

Make death and win conditions (fall off platform, hit flag)

Game can be reloaded and restarted upon player's death

**6/1:** Design gravity physics.

Add ability to jump.

Make page look pretty.

Modify background, buttons, canvas.

Add instructions to the side and title to the top

Display onscreen timer.

**6/3:** Design collision physics

Add obstacles and enemies

Fully flesh out high score table functionality.

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P5 -- This is the End

**6/5:** Add sprites (?)

Design multiple levels.

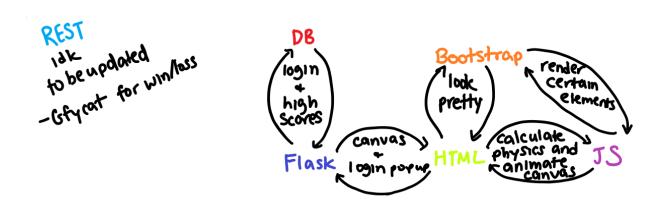
Load on droplet.

Estimated due date: 6/8?

### **COMPONENTS:**

- A *list* of program components with role of each specified.
  - o Flask
    - Load levels
    - Showing the game screen
  - o Sqlite
    - High scores (based on time)
    - User logins
  - Bootstrap Css
  - o Html
    - Provide canvas
  - Rest
    - dog.ceo random dog pictures
  - $\circ$  Js
- The physics of the platformer, interactivity/controls

## **COMPONENT MAP:**



#### **DATABASE ORGANIZATION:**

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Contains the top 10 scores of all time, organized from the top score to 10th highest score. Lower scores are not recorded.

UserID	Username	Score
Integer	String	Integer
3	Joe	696
0	Mama	420

High score table for logged in users. Will contain the top 5 scores of all users, organized by user ID. Scores will then be called and shown for currently logged in user.

Score	UserID	
Integer	Integer	
40	0	
20	0	
21	1	

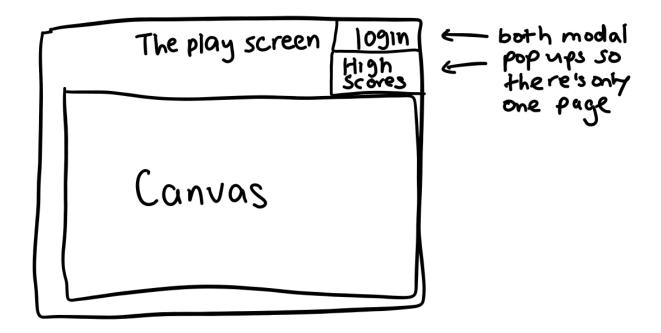
# Db of users

Username	Password	UserID
String	String	Integer
joe	joe123	0
JoE	123joe	1

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### **SITE MAP:**



#### TASK BREAKDOWN:

- Initial setup
  - Setup home template
  - Setup login functionality
  - Setup database manager
  - Integrate restful apis
- Game functionality
  - o Program user controls
  - Program physics
    - Gravity
    - Collision
  - Design a level
    - Grid system (how do we render the level)
    - Enemies/obstacles/hazard objects
    - Level gimmicks that aren't hostile (ropes? Moving platforms?)
  - o Add play state, pause state, win/loss state
  - Possible ways to customize game (gravity, # of jumps, speed, horizontal acceleration)
  - o sounds?
- Possible cool stuff
  - o Multiplayer

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P5 -- This is the End

o Build your own level

# TASKS AND ASSIGNMENTS:

Jessica: CSS/Bootstrap, Flask, Login, Highscores, Flood

Eric: Database, JavaScript

Ian: JavaScript

Michelle: CSS/Bootstrap, Timer, Flag