

Pitiful Pro Physics Platformer by theJoeTesseract  
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P5 -- This is the End

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

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

Design multiple levels.

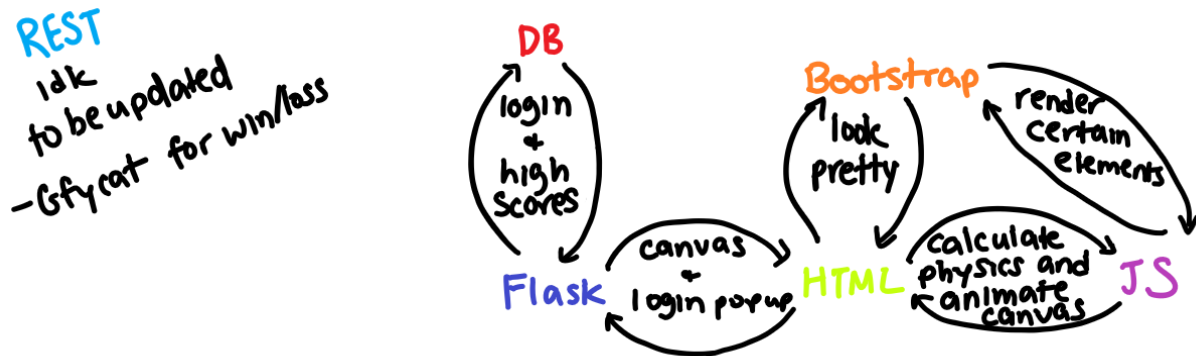
**Load on droplet.**

Estimated due date: **6/8?**

## COMPONENTS:

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

## COMPONENT MAP:



## DATABASE ORGANIZATION:

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

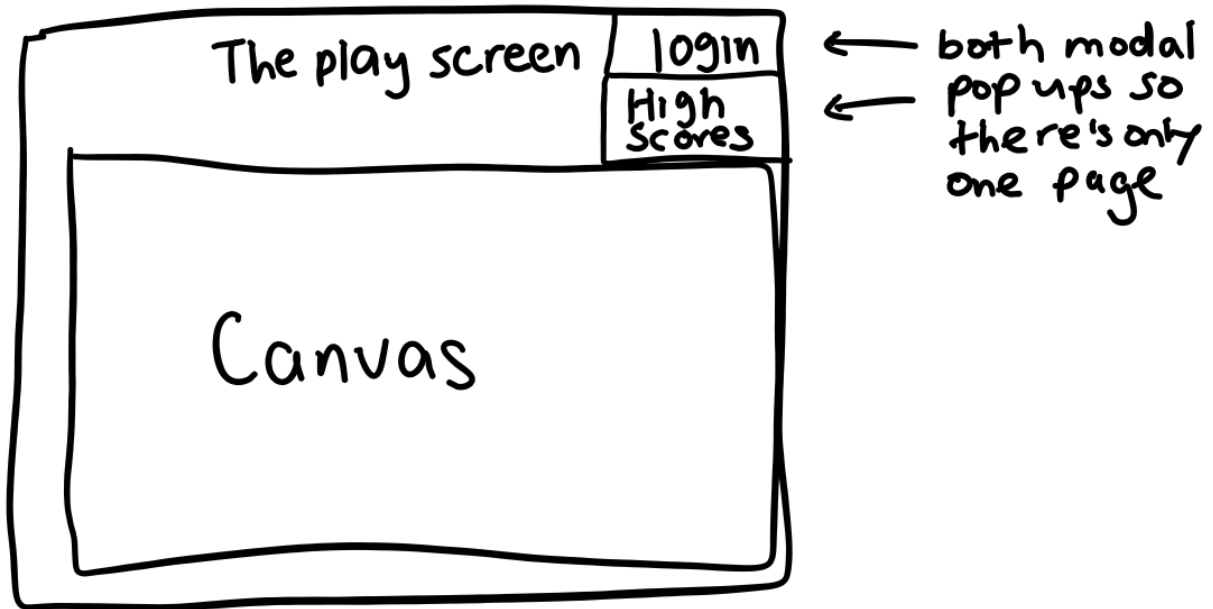
High score table for logged in users. Will contain the top 5 scores of all users, organized by user ID. Scores will then be called and shown for currently logged in user.

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

## SITE MAP:



## TASK BREAKDOWN:

- Initial setup
  - Setup home template
  - Setup login functionality
  - Setup database manager
  - Integrate restful apis
- Game functionality
  - 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?)
  - Add play state, pause state, win/loss state
  - Possible ways to customize game (gravity, # of jumps, speed, horizontal acceleration)
  - sounds?
- Possible cool stuff
  - Multiplayer
  - Build your own level

## **TASKS AND ASSIGNMENTS:**

**Jessica:**

**Eric:**

**Ian:**

**Michelle:**