ID2: Top 10 Risks + Mitigation Plan

- Low bus number (especially in regards to lead jobs)
    - Probability: Medium
    - Severity: High
    - Solutions:
        - Anarag is now shadowing Braunson (our build master).
        - Test lead has a team of 3 people (Amanda, Kevin and Clinton) that will be taking on more hands on testing for this deliverable.
        - Mesa has a team of developers for this deliverable

- Half of the team is unfamiliar with JavaScript
    - Probability: High
    - Severity: High
    - Solutions:
        - JS tutorial with Mesa (Saturday, Oct 12)
        - React tutorial with Iman (Tuesday, Oct 15)
        - Explicit instructions within group to become familiar with JS on their own time

- Scope creep
    - Probability: low
    - Severity: low
    - Solutions:
        - Just because something is easy to implement does not mean it should necessarily be implemented
        - Communication between developers and dev lead on features in progress
        - Explicit design goals and documentation for the current deliverable

- Gold Plating: putting in more hours than necessary to increase software quality at the expense of time costs
    - Probability: low
    - Severity: medium
    - Solutions:
        - Prioritization; features broken down into ‘nice to have’ and ‘must have’
        - Communication between developers and dev lead on features in progress
        - Time logging for individual components

- Ensuring all areas of the deliverable are being worked on (nothing slips through the cracks)
    - Probability: Medium
    - Severity: High
    - Solutions:
        - Github proven to be not the most efficient means of issue tracking; switched to trello which allows timelines for issues
            - Github used for bug tracking
            - Trello for organizational issues
        - Use of Trello and addition of a Gantt chart helps keep track of all aspects of the deliverable

- Time constraints between team members
    - Probability: High
    - Severity: Medium
    - Solutions:
        - With midterms coming up, timing conflicts were discussed during meetings; tasks were assigned accordingly
        - Creation of faux deadlines

- Unrealistic Scheduling: due to the demanding nature of a student schedule, realistic goals and prioritization of tasks is necessary
    - Probability: Low
    - Severity: Low

    - Solutions:
        - Upcoming meetings are planned during meetings
        - Incremental development
        - Schedule estimation

- Requirements Changes; as we enter into the implementation of our program, the smallest change to the requirements could possibly render hours/days/weeks of work useless.
    - Probability: Low
    - Severity: Medium
    - Solutions:
        - Regular meetings with the stakeholder
        - Weekly builds with the stakeholder

- Critical path task blocking; tasks that are necessary for the progression of the project are not completed on time, creating a blockage
    - Probability: medium
    - Severity: high
    - Solutions:
        - Key critical tasks will be divided equally and given adequate resources early on
        - The use of mocks will mitigate this as well, but won't appear until ID3.

- Unequal team contributions: It is anticipated that with different roles some people have more responsibility and thus will likely dedicate more time. The issue is when some individuals are spending orders of magnitude more than others.
    - Probability: High
    - Severity: High
    - Solutions:
        - Each member is expected to take initiative, volunteering to take on projects when they know they have time
        - If a team member feels unsure of what they should be doing, they are to check the git issues or trello board for projects.
        - If uncertain, a team member is to contact their team lead

- If the time log suggests an individual is doing an order of magnitude (as measured in hours) less work than the average we will follow the steps outlined in our group policy from the start of term, with a check in from the project manager.

Definitions:

x	Low	Medium	High
Severity	The problem can be mitigated with little team coordination and effort.	The problem must be discussed, and a solution must be planned as a team.	The problem must be discussed, and a solution must be planned as a team. The problem may not be solvable within the allotted deadlines. This has a disastrous impact on the final outcome of the project.
Probability	The problem is not likely to occur.	The problem may occur, or external factors beyond control may contribute to the problem coming to fruition.	The problem is very likely to occur and should be immediately mitigated.