**Group name:**

Tech Solutions R Us

**Group members:**

Ramia George

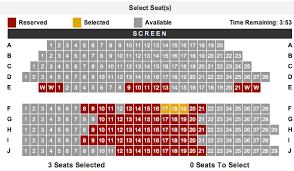
Justin Subero

**Project Name:**

Smart Seats

**Project description (At most 300 words):**

In this project, software will be developed to create a system to determine which seats in the Caribbean Cinemas 8 are already occupied. The system will monitor the status of seats in the cinema (booked, available or unavailable) and identify the exact location of the available seats. The system will use weight sensors that will relay a grid of the cinema’s seating to the user marking which seats are book, currently occupied or available. This will allow users to find seats that can accommodate their entire group in a timely manner. This grid is also available on the screen at the front desk of the cinema where attendants can guide users who do not have the app on which seats are available. An additional feature of this app will allow users to book seats and buy tickets in advance.



**Rationale for the project: (Problem definition, need for your solution)**

One of the hardest parts of watching a movie is often finding the perfect seat, which is not only time consuming, but becomes harder when you’ve come with a large group and there are unoccupied spaces all over the cinema but you’re never exactly sure which areas have enough seats to fit your entire group. Additionally, there is always the issue of finally finding a seat only to find out someone was already sitting there or leaving to go to the washroom only to come back to someone occupying your seats. Smart Seats aims to eradicate these problems.

**Business Benefits:**

Given that no software solution of this manner currently exists, the business would have a Smart Solutions would have a monopoly on the solution and increase business by selling to all cinemas in the country. Meanwhile, the implemented software would increase consumer satisfaction in cinemas and hereon encourage more customers to visit cinemas that use the software.

**Stakeholders**

**User stakeholders: (Who will be using the system?)**

Cinema Attendants and Front Desk

**Non-user stakeholders: (Who will not be directly using the system but benefits from the system?)**

Cinema Attendees

**User Environment: (Environment refers to the collection of hardware and software tools a system developer uses to build software systems.)**

Hardware: Weight Sensors, computer monitors, cell phones

**Alternatives and Competition to your solution: (Are there ways the problem can be solved? Are there already products on the market that provide a solution? If yes what are they?)**

An alternative to this solution is manually looking for available seats in the cinema. There are currently no products on the market that provide a solution to this problem.

Estimated Project Duration:

This project should require no more than 8-10 weeks to complete.

For each group member

Key skills (e.g. Databases, Web programming, etc.) –

**Ramia George:**

SDLC Management (Planning, Analysis, Documentation, Diagrams), Mobile App Development

**Justin Subero**

Databases (SQL, ERDs, Normalisation, Web Programming)

How you each member contribute to the project

**Statement of how you plan to work together (When you will meet, Collaboration tools you will use):**

The group will meet during free periods in the week. Collaboration tools such as Zoom, Whatsapp, Facebook, GitHub and Google Docs would be used to produce the final solution.

Time on Tuesday between 11:30 a.m. – 2:30 p.m. that you and all your group members are available to meet: 11:30