**PRCS252 – Computer Science Integrating Project:**

**Sprint Plan**

**Sprints:**

1. Sprint One

Minimum Viable Product

* Database Schema
* Middleware to establish a connection to the database
* Paper prototypes
  + Website
  + Mobile application
  + Desktop application
  + Wireframe diagrams

1. Sprint 2

Minimum Viable Product

Desktop Application

* As a driver, I want to be able to log in to the system, so that the service can start.
* As a driver, I want to be able to view current stock, so that the number of coaches available to drive in the depot is known.
* As a driver, I want to be able to see the bookings made for a journey, so I know how many people will board the coach.
* As a driver, I want to be able to access the coach service based on coach licence/service ID, so that the service can start.

Mobile Application

* As a customer, I want to be able to login to my account, so that I can access my account.
* As a customer, I want to be able to create an account, so that I can book a place on a coach.
* As a customer, I want to be able to select the day and time in which I want to travel, so that available services during those times will be available for me to book.
* As a customer, I want to be able to search for timetabled routes given the starting point and destination.
* As a customer, I want to be able to know the estimated time of the journey, so I know when the coach will get to my destination.

Website

* As an admin, I want to be able to login to the system, so that I can perform my responsibilities within the system.
* As an admin, I want to be able to create employee accounts, so that new employees can undertake their duties.
* As an admin, I want to be able to update employee accounts, so that information related to employees can be changed.
* As an admin, I want to be able to retrieve employee accounts, so I can view information on employees.
* As an admin, I want to be able to archive employee accounts, so that they are no longer active when an employee leaves the company.
* As an admin, I want to be able to approve customer account requests, so that customers can log in to their accounts.
* As an admin, I want to be able to allow the changing of customer passwords, so that customers may alter their password.
* As an admin, I want to be able to create records of new coaches, so that the stock can be documented.
* As an admin, I want to be able to view coaches in the stock inventory, so that I can ascertain what coaches are currently available.

1. Sprint 3

Minimum Viable Product

Desktop Application

* As a driver, I want to be able to accept a e-ticket booking reference from a passenger, to validate their journey on the coach.
* As a driver, I want to be able to start a service for a valid route, so that I can provide the travel product for customers.
* As a driver, I want to be able to stop a service for a valid route, so that I can provide the travel product for customers.
* As a driver, I want to be able to view coach capacity, so that the maximum number of passengers can be ascertained.

Mobile Application

* As a customer, I want to be able to create bookings, so that I can catch the coach to my desired destination.
* As a customer, I want to be able to make multiple bookings, so that I can travel with others.
* As a customer, I want to be able to pay via PayPal, so I can confirm my travel.
* As a customer, I want to be able to view all my currently booked tickets and be able to display my booking reference code to the driver upon coach entry.
* As a customer, I want to be able to update my account details, so that my information can be up to date.

Website

* As an admin, I want to be able to retrieve routes, so that I can view them.
* As an admin, I want to be able to archive routes, so that that they can be decommissioned.
* As an admin, I want to create timetables for the routes, so that the routes and times can be documented.
* As an admin, I want to able to update coaches, so that the status can be checked, and stock status can be updated
* As an admin, I want to be able to archive coaches in the stock inventory, so they can be decommissioned if not in use or replaced.
* As a manager, I want to be able to view the drivers, so that I can see the driver’s that are available
* As a manager, I want to be able to assign a driver a coach for the shift, so that the driver can perform his duties.
* As a manager, I want to be able to update and make changes to a driver shift

1. Sprint 4

Minimum Viable Product

Desktop Application

* As a driver, I want to be able to access the shift schedule, so that I know when I need to work.
* As a driver, I want to be able to notify of breakdowns, so that a replacement coach will be called to assist passengers.
* As a driver, I want to be able to view the set route for the journey, so that the coach can arrive at the destination.
* As a driver, I want to be able to view remaining seats, so that the amount of spare room can be ascertained.

Mobile Application

* As a customer, I want to be able to view my account details, so that I can check my information is correct.
* As a customer, searching for routes, I want to see fares and associated times for a journey, so that I can make sure I book the right journey for me.
* As a customer, I want to be able to know my starting station, so I can know where to board the coach.
* As a customer, I want to be able to know my ending station, so I can know where to get off the coach.
* As a customer, I want to be able to view my prior travel history, so I can easily track where I have been and make new journey’s based on prior ones.
* As a customer, I want to be able to request the termination of my account, so that I can stop using the service.

Website

* As an admin, I want to update the timetables of routes, so that the routes and times can be amended.
* As an admin, I want to retrieve the timetables of the routes, so that I can view the routes and times.
* As an admin, I want to be able to archive the timetables of the routes, so that timetables can be decommissioned.
* As an admin, I want to be able to deploy replacement services in the event of a coach breakdown, so we can assist passengers.
* As a manager, I want to be able to remove an employee’s shift, so that they no longer undertake that shift.
* As a manager, I want to view all available routes, so that I can see what routes will need covering
* As a manager, I want to view the timetables, so that I can see what time the routes are taken
* As a manager, I want to assign a driver a route for their shift, so that the driver can take passengers to their destinations.