**Team Progress Report: ViaRail Ticketing System**

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Project Overview: The ViaRail Ticketing System is a software project aimed at developing a user-friendly and efficient ticket booking system for customers and administrators. The system comprises multiple windows, including the MainWindow with links to the customer and admin sections.

1. Work In Progress (20%)

Main Window (Main.xaml)

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Functionalities Implemented:

* option to select between Admin and Customer

Upcoming Enhancements:

* Improving design
* Improving the interface for better user experience.

**Admin Section (admin.xaml)**

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Functionalities Implemented:

* Insert records into the database.
* Select records based on TripID.
* Update existing records based on TripID..
* Delete records based on TripID.
* Display saved data in a DataGrid from PgAdmin 4.
* Button to return to Main.

Upcoming Enhancements:

* Adding options to select records by departure station, destination station, and date/time.
* Improving the interface for better user experience.
* Add textboxes for date/time

**Customer Section (customer.xaml)**

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Functionalities Implemented:

* Display a list of available trips for customers from database.
* Allow customers to select the number of tickets from list and add them to the cart.
* Calculate the total amount for selected tickets.
* Display the selected items in a listbox after adding to cart.
* Successfully remove the selected seats from the main database during checkout.

Upcoming Enhancements:

* Implement advanced search and filtering options, allowing customers to filter trips based on various criteria, including departure station, destination station, and date/time.
* Enhance the cart functionality to allow customers to modify their selections (e.g., increase or decrease the number of tickets).
* Integrate features for printing tickets.
* Enhance the user interface to provide a more user-friendly and visually appealing experience.
* Integrate features for storing customer profiles and booking history.

Database Section on Pgadmin 4

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2. Tools Finalized (10%)

• Development Tools:

• Visual Studio for developing the WPF application.

• PgAdmin 4 for managing the database.

• .NET Framework for building the application.

• PostgreSQL for the database.

• Other Tools:

• No other tools are being used for development at this time.

**3. Project Plan for the Next 4 Weeks (20%)**

Our project plan for the next four weeks is as follows:

Week 1: October 20-26

• Finalize the implementation of the Admin section by adding options to select records by departure station, destination station, and date/time.

• Improve the user interface for Admin functionalities.

Week 2: October 27-November 2

• Enhance the customer section by allowing customers to filter trips based on departure station, destination station, and date/time.

• Implement the checkout and payment processing system.

• Begin testing the application.

Week 3: November 3-9

• Continue testing and debugging the application.

• Optimize the code for better performance.

• Prepare for database migration to a REST API-based system.

Week 4: November 10-16

• Complete database migration to a REST API-based system.

• Generate test programs to thoroughly test the application's functionality.

• Conduct final testing and resolve any issues.

Team Member Contributions

Team members have made the following contributions:

Member 1 (Adriano):

* Worked on the Admin section and database management, responsible for 50% of the work in the deliverable.

Member 2 (Mario):

* Worked on the Customer section and testing, responsible for 50% of the work in the deliverable.

Conclusion

The ViaRail Ticketing System project has made substantial progress in the development of the ticket booking application. The team has successfully implemented core functionalities in both the Admin and Customer sections, and we have finalized the development tools and database. Our plan for the next four weeks is designed to ensure the completion of the project within the timeline.