Gulnara Azizova

CRN 10357

IT Project Management – Develop Project Charter

15.10.2023

## Train Ticket Booking System

Project Purpose/Problem	People who use the train spend much more time reaching their destinations (work, university, etc.) since they have to stand in line to purchase their tickets. Therefore, they arrive late at their destinations.  The project aims to allow passengers to book their train tickets online by saving time. The system which is based on creating a mobile application will facilitate the process of purchasing train tickets for passengers:  • Passengers can select their seats using the mobile app; • The system allows passengers to pick the appropriate train routes to reach their desired destinations; • Delays are avoided by the system.
Project Objectives	<ol> <li>The significance of having a proper user interface and a high level of development of the application to ensure that passengers can buy their tickets rapidly and without facing difficulties;</li> <li>Offering an exact booking process and a simple navigation system;</li> <li>Providing detailed and real-time information about train timetables and routes;</li> <li>Delivering timely support services for passengers to assist;</li> <li>Offering various payment options (credit card, debit card, wallets), including online payment choices;</li> <li>The project must be finalized before 2025.</li> </ol>
Success Criteria	<ol> <li>Users should take at least 5 minutes to complete a ticket booking process;</li> <li>Ensure ongoing connectivity and accessibility by preserving the system at a higher level;</li> <li>Along with adhering to confidentiality and privacy of data guidelines, passengers get details about current time train timetables and accessible seats in a short duration;</li> </ol>

4. Guaranteeing rapid assistance and responses to user calls within 24 hours;
<ol> <li>Reduces payment processing mistakes across all financial transactions;</li> </ol>
6. Before importing data records into the database with modified
schedules, routes, and seat accessibility, the project must be finished (before 2025).
inisiled (before 2023).
R1. Users must register their accounts and log in safely to access the
system; R2. Enables users to look for train routes, seats, real-time schedules,
and departure/arrival dates using a search engine to make bookings;
R3. The implementation of mechanisms for payment must offer passengers a variety of payment alternatives;
R4. Essential alerts to notify passengers about updates of the train
schedules;
R5. Allowing a mobile app to be accessed offline; R6. Providing users with feedback mechanisms and following privacy
regulations.
M1. Completing to development of the system architecture, user
interface design, and database design;
M2. Adding user sign-up and authentication procedures;
M3. Synchronize with the providers of real-time train schedules; M4. Creating essential features to search for, select, book tickets and
payment options;
M5. Mobile App development for both Android and iOS users;
M6. Configuring the system upward to deliver notifications and confirmations for bookings;
M7. Implementing testing phases (unit testing, integration testing, and
user acceptance testing); M8. Lastly, introducing the app to the public via uploading it to app
stores (Google Play & Apple Pay).
When estimating the cost and total duration spent on creating a
mobile-based app, I want to consider the number of pages of the
application and the time spent developing each page. Let us assume
that we have 7 pages ("Login Page", "User Profile", "Home", "Booking and Payment", "Train Details", "Seat Selection", and "Help
and Support" pages); we build the application for both Android &
iOS users, then time spent on one page can take 1.5 - 2 months.  Developing one page for both smartphone users on average may cost
70,000 AZN.
Time: 0 months 1 year 2 months
Time: 9 months – 1 year 2 months Budget: 1.470,000 AZN – 280.000,000 AZN

	Importance Factors: Scope and Quality: 50%; Time: 30%;
	Budget: 20%
Assumptions	A1. Passengers can log into their accounts through the application both online and offline modes; A2. Passengers will be updated on any changes to train schedules and routes via the system.
Constraints	C1. It might be more challenging to wrap up to project on time if there the project not enough qualified highly skilled designers, developers, testers, and other team members; C2. The building of the app may be delayed by complications with scaling up the number of passengers and server capacity; C3. Budget limitations.
Risks	R1. Unexpected system interruptions and a failure to book tickets due to overloading; R2. Falsification of personal data that belongs to passengers; R3. Unable to access the system of the application due to slower network and processing.
Project	<ol> <li>Project Manager/ Jamaladdin Hasanov;</li> <li>Project Sponsor/ CEO/ Pasha Pashazade;</li> <li>Product Owner/Identifies prioritizes, and delivers a ticket train booking product to satisfy users' requirements /Madina Abbasova;</li> <li>Project Owner/CEO/Nuraddin Sadili;</li> <li>Application Development Team/develops, designs, and retains the booking application on both Android &amp; iOS platforms/ Front-end, Back-end, Database Developers, Database Engineers (for storing data and working with big data), Flutter, Mobile (Android &amp; IOS) developers, and UX/UI designer;</li> </ol>
Stakeholders	<ul> <li>6. QA and Testing Team/carries out testing, quality assurance, and validation operations on the application/QA Tester</li> <li>7. IT Helpdesk/Follows the deployment of the system, technical support in challenges on the internet connection, system interruptions, and solves troubleshooting issues/Nariman Aliyev and IT Department;</li> </ul>

- 8. Financial Aid Team/Handles budget-related processes and assists passengers in solving their payment problems/ADA University's Finance Department
- 9. User Representatives/presenting and dealing with passengers' needs/User Advocates, Customer Advisors
- 10. Train Operations Team/Provides passengers with train schedule, routes information, and coordinates to give accurate data/Train Scheduling Manager, Train Dispatcher, Emergency Response Coordinator, Communication Specialists;
- 11. Train Service Team/Offers services to passengers and protects their privacy/Assistance, Customer Service.
- 12. Public Authorities/Controls and supervise trains/Government agencies