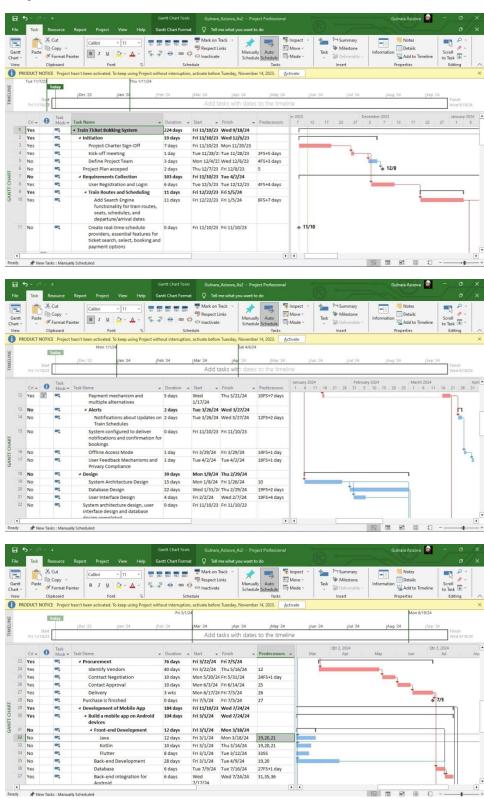
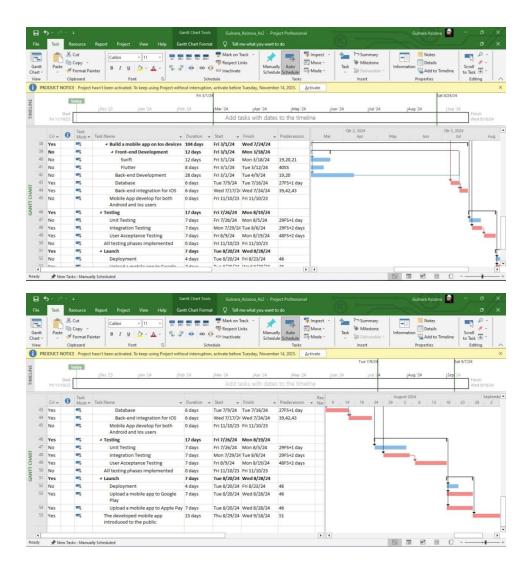
Project Schedule





Project Charter (Updated Version)

1. 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; 2. Offering an exact booking process and a simple navigation system; 3. Providing detailed and real-time information about train timetables and routes; 4. Delivering timely support services for passengers to assist; 5. Offering various payment options (credit card, debit card, wallets), including online payment choices; 6. The project must be finalized before 2025;

	Out of Scope: 1. The system will not allow passengers printing of paper tickets; 2. The mobile application does not enable passengers (users) to share all data about train routes, schedules, and seat availability through social media platforms; 3. At the location, local transportation options, such as taxis and auto rentals are not covered by the mobile app; 4. The app will not allow more than one user profile to be created under one account.
High-level Requirements	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 functionality 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.
Milestones	M1. Adding user sign-up and authentication procedures; M2. Create real-time schedule providers, essential features for ticket search, select, booking and payment options; M3. Configuring the system upward to deliver notifications and confirmations for bookings; M4. Completing system architecture design, user interface design, and database design; M5. Mobile App development for both Android and iOS users; M6. Implementing testing phases (unit testing, integration testing, and user acceptance testing); M7. Lastly, introducing the app to the public by 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",

Budget/Cost Estimations	"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 10,000 AZN. Time: 9 months – 1 year 2 months Budget: 15,000 AZN – 140,000 AZN Importance Factors: Scope and Quality: 50%; Time: 30%;
	Budget: 20%
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.
	 Project shall be finalized before May 31, 2025 (new legislation will be applied); Project shall be finalized before May 31, 2022 (this is Y2K problem); The total budget shall not exceed 20,000 AZN.
Project Stakeholders	 Project Manager/ Jamaladdin Hasanov; Project Sponsor/ CEO/ Pasha Pashazade; Product Owner/Identifies prioritizes, and delivers a ticket train booking product to satisfy users' requirements /Madina Abbasova; Project Owner/CEO/Nuraddin Sadili; Application Development Team/develops, designs, and retains the booking application on both Android & iOS platforms/ Front-end, Back-end, Database Developers, Database Engineers (for storing data and working with big data), Flutter, Mobile (Android & IOS) developers, and UX/UI designer, Scrum Masters;
Stakeholders	 QA and Testing Team/carries out testing, quality assurance, and validation operations on the application/QA Tester

- 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;
- 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
- 13. Marketing Team/Coordinates user registration and usage while promoting the mobile application/Content Creator, Advertiser, Brand Manager
- 14. Consumer Team/Collects and analyze customer feedback, make trends, and requirements/Business Analysts
- 15. Legal Team/Guarantees adherence to relevant laws and rules, especially those concerning privacy and data protection/Legal Department
- 16. Customer Support Team/Help customers and responds to their questions and concerns/ Customer Support Representatives
- 17. Risk Management Team/Identify and handle the upcoming risks raised in a development of an application/Risk Managers, Security Experts, Technical Leads
- 18. System Administration Team /Manage deployment procedures, and configuring and maintaining servers/System Administrators
- 19. Train Authorities/Ensure adherence to train rules and provide real-time train schedules, seta availability, and another essential information/Operations Managers, Infrastructure Managers, IT Managers;
- 20. Network Administration Team/Ensure performance and connectivity by keeping an eye on the network architecture/Network Administrators, Network Engineers;

21. Analytics Team/Use data-driven technologies, advanced analytics, and create dashboards, reports, and visualizations to provide strategic insights/Data Scientists, Data Analysts, Business Intelligences.