

Final Project Proposal

(Voyago Website)

Team Members & Roles :

Mohamed Yehia Adly - Team Leader - : Frontend , Backend & UI/UX

Shahd Mahmoud Yehia : Backend

Shorouk Yehia Abd-Elfattah : Backend

Mohamed Talal Mekhemar : Frontend

Seif Mohamed Naguib : Frontend

Nourhan Mohamed El-Sayed : Frontend

Project Overview & Description :

Voyago is an integrated online travel agency system designed to enhance the travel booking experience through a smart and user-friendly digital platform. It enables users to search for destinations, compare travel packages, book flights and hotels and organize personalized travel plans seamlessly.

The system also includes an admin dashboard that allows travel agencies to manage packages, bookings, customer data and payments efficiently.

Voyago aims to digitize and modernize the tourism sector in Egypt by leveraging AI and data analytics to provide intelligent recommendations based on user preferences, browsing behavior and previous bookings.

Project Objectives :

- Develop an intuitive and responsive web platform that allows users to easily browse, plan and book travel packages.
- Integrate real-time APIs for flights, hotels and destinations to ensure updated information and seamless booking experiences.
- Provide personalized recommendations based on user preferences and travel history.
- Enhance user trust and engagement through a secure payment system and verified reviews.
- Optimize platform performance and ensure accessibility across devices and browsers.

Tools & Technologies :

- HTML5
- CSS3
- JavaScript
- BootStrap
- React.js
- Node.js
- Git/Github

Milestones & Deadlines :

Week 1 – Project Setup: Define project scope, assign roles, set up GitHub repo & environment. (Deadline: 12/10/2025)

Week 2 – UI/UX Design: Create wireframes, color palette, and mockups using Figma. (Deadline: 30/10/2025)

Week 3 – Frontend Development: Build main pages (Home, Explore, Booking, About, Contact) using React. (Deadline: 12/11/2025)

Week 4 – API Integration: Connect APIs for flights, hotels and destinations; set up payment system. (Deadline: 19/11/2025)

Week 5 – Testing & Optimization: Perform unit testing, fix bugs, optimize performance and SEO. (Deadline: 25/11/2025)

Week 6 – Deployment & Final Review: Deploy to hosting platform, finalize documentation, and present project. (Deadline: 1/12/2025)

KPIs :

1. Code Quality & Development

- Maintain code reusability above 80% with modular React components.
- Achieve 70%+ test coverage using Jest/React Testing Library.
- Ensure effective state management using Redux or Context API.

2. Performance & Optimization

- Page load time under 3 seconds on desktop and mobile.
- API response time below 500ms.
- Maintain Lighthouse performance score above 90.

3. User Experience (UX)

- 100% mobile responsiveness and accessibility score of AA (WCAG 2.1).
- Conduct user testing with at least 20 participants for feedback.
- Achieve 85%+ user satisfaction in post-launch surveys.

4. Deployment & Scalability

- Deployed successfully on Vercel/AWS/Firebase with 99.9% uptime.
- SEO score above 85 using best practices.
- Scalable architecture supporting 10,000+ concurrent users.

5. Business & Functional Impact

- 100% completion of planned core features before final review.
- Acquire 100+ active users during initial beta phase.
- Resolve 95% of reported bugs within 48 hours of reporting.