



North East University Bangladesh

Thesis/Project CSE-400

Department: BSC (Engg.) in Computer Science and Engineering

Project Proposal,

Project Name: **BD TravelSpirit - A Full-Stack Tour Booking & Management Platform**

Submitted By:

Team Member – 1:

Sadiqul Islam Shakib

ID: 0562220005101043

Session: Summer-22

Team Member – 2:

Md. Istiak Hussain

ID: 0562220005101053

Session: Summer-22

BD TravelSpirit, a Full-Stack Tour Booking & Management Platform

User Roles & Responsibilities:

Role	Description
User	Can search, book tours, submit reviews, chat, report issues.
Organizer	Can apply to become organizer, create/manage tours after verification.
Support-Agent	Verifies organizer applications, handles reports, reviews, and chats.
Owner-Agent	Top-level admin who oversees staff, finances, profits, and analytics.

Authentication System:

- **Library:** NextAuth.js
- Features:
 - Email/password and social login
 - Role-based access control (RBAC)
 - JWT-based session storage
 - Middleware guards for route protection

Client App Features

- User Features

Title	Description
Tour Search & Filter	Search by location, type, rating, price range, dates, etc.
Book Tours	Multi-tier pricing (Standard, Premium), discount support
Rating & Review System	Rate tours, leave feedback, attach images
Notifications	Booking updates, discounts, system messages
Report Tours	Report false/misleading tours or organizer behavior
Chat with Organizer	Real-time or stored messages with organizer
Profile Management	Update info, view bookings, reviews

- Organizer Features

Title	Description
Organizer Application	Apply with documents, company name, bio, etc.
Organizer Dashboard	Manage tours (create/update/delete), view bookings, messages
Tour Submission & Approval	All tours must be verified by support-agent before publishing
Revenue & Stats Overview	(Optional future addition) view tour sales and engagement
Notifications	Tour approvals, booking requests, messages

Admin Dashboard Features

- Support-Agent Features

Title	Description
Organizer Verification	Approve/reject organizer applications and documents
Tour Moderation	Approve tours submitted by organizers
User Reports Management	Resolve or reject reports against tours
Messaging	Contact organizers or users regarding reports
Article Management	Create and manage articles (blogs, tips, etc.)
Admin Notifications	View alerts (e.g., failed payments, system errors, flagged content)

- Owner-Agent Features

Title	Description
Manage Employees	Add, remove, or change roles of support-agents
Platform Analytics	Track revenue, total bookings, user growth, active tours
Review Logs & Activity	View activity history of employees
Financial Overview	Track profits, withdrawals, discounts

Tech Stack: Next.js (app router), TypeScript, Tailwind CSS, Shadcn UI, Zustand store management, Axios API, Socket.io for real-time communication, and MongoDB as the database.

User UI: The BD TravelSpirit is a dynamic, user-centric web application where individuals can explore, book, and review curated tours organized by verified hosts. Users can also apply to become tour organizers by submitting their credentials and documents. Once approved by internal staff, organizers gain access to a dashboard to manage their tours.

This client-facing platform ensures a seamless and immersive experience through advanced filters, interactive reviews, live chat with organizers, and personalized notifications. Built with **Next.js 15+**, **TypeScript**, **Tailwind CSS**, **Shadcn UI**, and **MongoDB**, it provides a high-performance, responsive experience on all devices.

Admin Management System: The admin dashboard is a secure, role-based admin panel for internal staff to manage the ExploreEase ecosystem. It is tailored for two internal roles: **Support-Agents** and **Owner-Agents**.

Support-Agents are responsible for onboarding organizers, verifying their submitted information, approving or rejecting new tours, managing user reports, and communicating with stakeholders.

Owner-Agents hold high-level authority to manage the entire system — from staff roles to financial summaries and platform analytics. This separation ensures streamlined, secure, and scalable operations.

The dashboard is built for maintainability and admin efficiency using **Next.js**, **TypeScript**, **Shadcn UI**, and **MongoDB**, with robust role-based access control powered by **NextAuth**.