

stamfordtutoring.org – Tutoring Website Design Document

Project Summary: stamfordtutoring.org is an online platform designed to streamline the tutoring process for students and tutors. The website improves communication, makes scheduling easier, and creates a centralized space for managing tutoring sessions. This product matters because current scheduling methods are often inefficient, disorganized, and difficult to scale as more students and tutors join.

Problem Statement: Students and tutors currently rely on inconsistent communication methods (word-of-mouth, group chats, or scattered messages), making it difficult to schedule, track, and manage tutoring sessions efficiently.

Use Case: Students will use the platform to browse subjects, select a tutor, and book available time slots. Tutors will use the platform to view upcoming sessions, communicate with students, and manage availability. Administrators can track participation and growth over time.

Goals and Objectives: 1. Simplify the process of booking, rescheduling, and canceling tutoring sessions. 2. Improve communication and accessibility for students and tutors. 3. Provide analytics to measure participation and engagement across the program.

Key Features and Functions: 1. Tutor Booking System – Students select a subject and book available tutors. 2. Live Chat Communication – Tutors and students can communicate directly within the platform. 3. Easy Cancellation / Reschedule System – Users can modify sessions with a single click. 4. Analytics Dashboard – Administrators can view participation data and engagement trends. 5. Subject Selection Interface – Users browse subjects and tutor availability efficiently.

Tech Stack and Tools: Frontend: HTML, CSS, JavaScript, React (or Next.js optional) Backend: Node.js, Express.js Database: MongoDB (user profiles, schedule data, chat logs) Hosting: Vercel or Replit / GitHub Pages (front), Railway / Render / MongoDB Atlas (backend) Version Control: Git and GitHub

Algorithm (High-Level): 1. User logs in or selects "Book a Tutor". 2. User selects subject area. 3. System displays available tutors and time slots. 4. User books or reschedules a session. 5. System saves session data to database. 6. Notification is sent to tutor and student. 7. Session data is included in monthly analytics reports.

Timeline: Month 1: Design UI in Figma + finalize data model. Month 2: Build main features: booking, subjects, chat. Month 3: Add analytics dashboard + testing, polish. Month 4: Launch at the start of the school year.

Risk Mitigation: Risk: Low engagement if users forget the website exists. Mitigation: Send automated reminders & promote the website in school announcements.

Evaluation Criteria: 1. Increased number of tutoring sessions booked compared to current method. 2. Students report improved ease of scheduling. 3. Administrators can track participation growth monthly.

Future Considerations: Maintenance: Routine security updates & user database cleanup. Future Feature: Community service hour tracking + session feedback ratings.