

WellTrack: A WEB-BASED WELLNESS MANAGEMENT SYSTEM FOR POLICE OFFICERS

A FINAL YEAR PROJECT PROPOSAL

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Introduction

- Police officers face high levels of occupational stress caused by exposure to trauma, long working hours, and intense job demands. Chronic stress often results in burnout, depression, and reduced productivity.
- Current wellness programs are mostly reactive and lack confidentiality or integration.
- WellTrack is a web-based wellness management system to be designed to help officers monitor and manage stress through digital tools such as stress assessments, wellness resources, peer support forums, and counseling modules to support officers' mental and emotional well-being.

Problem Statement

- Police departments lack a unified, proactive, and confidential system for managing occupational stress.
- Existing wellness efforts are fragmented, reactive, and primarily paper-based. Officers often hesitate to seek help due to stigma, lack of confidentiality, and limited access to professional resources.
- This project aims to design a secure and user-friendly system to address these gaps.

Objectives

General Objective:

- To design and develop a web-based wellness management system to help police officers reduce and manage occupational stress.

Specific Objectives:

- Develop secure user authentication and role management.
- Implement stress assessment and tracking module.
- Create a digital wellness resource center.
- Build a peer support forum for anonymous communication.
- Develop counseling booking and management functionality.
- Provide an admin dashboard for analytics and reporting.

Scope of the Project

The project includes:

- The project scope, due to time constraint will be limited to Wiawso Divisional Office
- Development of a web application using Node.js (JavaScript), MongoDB, React.js, ShadcnUI and TailwindCSS as the technology stack.
- Three user roles: Police Officer, Counselor, and Administrator.
- Functional modules: Authentication, Assessment, Resource Center, Peer Forum, Counseling Booking, and Dashboard.

Methodology

The Agile methodology will be used to allow flexible and iterative development.

Phases:

1. Requirement Gathering – identify users' needs and system expectations.
2. System Design – create database schema, UI mockups, and system architecture.
3. Development – implement modules using Node.js (Express.js) MVC pattern.
4. Testing – conduct unit, integration, and user acceptance testing.
5. Deployment – deploy locally or online for demonstration.
6. Evaluation – gather feedback and refine final deliverables.

Development / Implementation Tools

- Backend: Node.js (Express.js)
- Frontend: HTML5, CSS3, TailwindCSS, React.js
- Database: MongoDB
- Code Editor: Visual Studio Code
- Version Control: Git/GitHub
- Testing Tools: Postman or HTTPie
- Design: Figma or Adobe XD

Expected Outcome

- A fully functional web-based system that enables officers to manage stress proactively.
- Access to mental health resources, counseling, and peer interaction.
- Data-driven insights for administrators to improve wellness policies.
- Promotes resilience, reduces stigma, and fosters a supportive work culture.

Timelines / Project Milestones

- Weeks 1–2: Requirement Analysis – Identify user needs and conduct research.
- Weeks 3–4: System Design – ERD, UML, interface mockups.
- Weeks 5–9: Development – Implement system modules.
- Weeks 10–11: Testing – Perform unit and user acceptance tests.
- Week 12: Deployment – Host system locally or online.
- Weeks 13–14: Documentation and Presentation Preparation.

References

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Thank You