

PROJECT PLAN DOCUMENT

(Due: 31st January 2024)

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| Project number | 42 |
| Project Title | Intelligent Wardrobe Management System |
| Document | Project Plan |
| Creation date | 24th January 2024 |
| Created By | Vansh Motwani was primarily responsible for this document. Shaunak Biswas and Jayesh Sutar also worked on this document as well. |
| Client | Organisation: Itnurtureden; Mentor: Dr Neeta Gulati |

Brief problem statement

The project aims to enable efficient wardrobe organization through implementing an Intelligent Wardrobe Management System. Utilizing deep learning, artificial intelligence, and machine learning, the system aims to transform how users engage with their wardrobes. The main objective is to develop a website and a mobile app that efficiently categorizes clothing items and offers personalized outfit suggestions from the clothes in their wardrobe. Considering user preferences, real-time weather data, and contemporary fashion trends, the system strives to enhance the wardrobe management experience.

Team Members

Shaunak Biswas: Developer, UI/UX Designer

Vansh Motwani: Developer, Technical Writer

Harpreet Singh: Developer, UI/UX Design

Jayesh Sutar: Developer, Database Administrator

Raveesh Vyas: Developer, Technical Writer

We will not delineate developer roles into distinct front-end and back-end divisions as most tasks will be executed collaboratively. Tasks like requirements engineering and prototyping will also be contributed to by the complete team.

Team Communication

- The team will meet every three days or as necessary for pivotal decision-making sessions, combining in-person meetings with communication via messaging applications for continuous coordination.
- Client meetings are currently scheduled twice a week, on Wednesdays and Saturdays, to provide comprehensive project updates. However, the frequency of these meetings may be adjusted in the future to avoid redundant reporting.
- Communication with interns working on the project will be facilitated through meetings and messaging apps like WhatsApp to discuss progress and integrate the modules they are working on.

Development Environment

Development Environment:

- **Code Editor:** Visual Studio Code
- **Version Control:** Git (GitHub for collaboration)
- **Database:** MongoDB
- **Back-end Framework:** Node.js with Express.js
- **Front-end Framework:** React for both website and React Native for the mobile app

Programming Language:

- **JavaScript:** Used for both backend (Node.js with Express.js) and front-end (React, React Native) development.
- **Python:** Python scripts for integrating machine learning models into the Node.js backend.

Collaboration Tools:

- **Communication:** Offline and through WhatsApp
- **Version Control Integration:** GitHub for code repository and version control
- **Documentation:** Markdown for project documentation

UI Design:

- **Design Tool:** Figma for creating the representative UI and design prototypes.

Testing:

- **Back-end Testing:** Using tools like Postman for API testing and Jest for unit testing in Node.js (tentative).
- **Front-end Testing:** Jest and React Testing Library for unit testing React components, and Cypress for end-to-end testing (tentative).
- **Mobile App Testing:** Jest and React Native Testing Library for unit testing React Native components, and Appium for end-to-end testing (tentative).

Milestone Schedule

| Milestone | Due Date | Release | Deliverable? |
|--|---------------------------|---------|--------------|
| <i>Create draft requirements</i> | 5 th February | R1 | No |
| <i>Finalize requirements</i> | 10 th February | R1 | Yes |
| <i>Decide on UI structure</i> | 14 th February | R1 | Yes |
| <i>Create representative UI (using Figma)</i> | 20 th February | R1 | Yes |
| <i>Create Basic Backend Shell</i> | 1 st March | R1 | Yes |
| <i>Adapt UI Structure for Mobile</i> | 5 th March | R1 | Yes |
| <i>Individual integration of ML models into the backend codebase</i> | 7 th March | R1 | Yes |
| <i>Testing the code with 3 integrated models</i> | 13 th March | R1 | No |
| <i>Implement UI in React Native</i> | 11 th March | R1 | Yes |
| <i>Adjust Backend Code for Mobile Compatibility</i> | 15 th March | R1 | Yes |
| <i>Test App on Local Devices</i> | 20 th March | R1 | No |
| <i>Test App on Various Mobile Devices</i> | 25 th March | R2 | No |
| <i>Create the described UI using MERN stack</i> | 28 th March | R2 | Yes |
| <i>Create Authorization/Login System</i> | 28 th March | R2 | Yes |
| <i>Testing the website on local machines</i> | 1 st April | R2 | No |
| <i>Hosting the website</i> | 11 th April | R2 | Yes |
| <i>Testing website stability on different machines</i> | 15 th April | R2 | No |