



School of Computing
SRM IST, Kattankulathur – 603 203

Course Code: 21CSC303J

Course Name: Software Engineering and Project Management

Experiment No	3
Title of Experiment	To identify a software project, craft a precise problem statement, and create a product vision document
Name of the candidate	SAATVIK AGNIHOTRI
Team Members	RIYA RAI, MD. DILSHAD ALAM
Register Number	RA2211003011922, RA2211003011919, RA2211003011917
Date of Experiment	14-02-2025

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Exercise	5	
2	Viva	5	
Total		10	

Staff Signature with date

Aim : To identify a software project, craft a precise problem statement, and create a product vision document.

Team Members:

S. No	Register No	Name	Role
1	RA2211003011922	SAATVIK AGNIHOTRI	Lead
2	RA2211003011919	RIYA RAI	Member
3	RA2211003011917	MD. DILSHAD ALAM	Member

Project Title: AI Technical Document Generator(AutoDocX)

Project Description :

The AI-Based Technical Documentation Generator is an automated system designed to generate human-readable, concise, and accurate documentation for software projects. This system integrates directly with version control tools like GitHub, triggering the creation of documentation each time new code is committed. It analyzes the changes in the codebase (including new functions, classes, and modifications to existing ones), generates summaries, and organizes them in a centralized documentation file (e.g., Markdown or HTML). This eliminates the need for manual documentation, ensuring the documentation is always up-to-date and aligned with the latest code changes.

Product Vision

An AI-driven tool that generates and updates documentation automatically, making sure that developers don't have to waste time writing docs manually. It integrates with version control (like GitHub) and keeps documentation always up-to-date as code changes. The goal is to make documentation effortless, readable, and always in sync with the actual project.

1. Audience

Primary Audience

- **Developers & Engineers:** People actively working on code who need documentation that actually reflects the latest changes without extra effort.
- **Open-Source Contributors:** When joining a new repo, having clear docs is super helpful. This tool ensures documentation isn't outdated or missing.

Secondary Audience

- **Project Managers & Team Leads:** Want to make sure that documentation is always available without asking developers to update it manually.
- **Technical Writers:** They can use AI-generated docs as a draft and refine it instead of writing everything from scratch.

2. Needs

Primary Needs

- **Automatic updates** so documentation is never outdated.
- **Version control integration** to generate docs directly from the latest code.
- **Readable and well-structured docs** without extra work from developers.

Secondary Needs

- **Custom templates** so projects can have docs in a format that suits them.
- **History tracking** to check how documentation evolves over
- **Export options** (Markdown, PDF) so docs can be used in different places.

3. Product

Core Product

A system that hooks into GitHub (or other version control) and automatically generates documentation every time there's a code change. No need to manually write docs—it's all handled by AI.

Additional Features

- **Understands code changes** (new functions, classes, modifications) and writes meaningful summaries.
- **Integrates with CI/CD** so docs are updated automatically without extra steps.
- **Stores documentation in the docs/ folder** of the repo for easy access.
- **Supports different formatting** (Markdown, HTML, etc.) so teams can customize it as needed.

4. Values

Core Values

- **Automation:** Reduces manual work, saving time for developers.
- **Clarity:** Ensures documentation is actually useful and not just a bunch of auto-generated noise.
- **Integration:** Works smoothly with GitHub and version control.
- **Accessibility:** Provides docs in formats that suit different users.

Differentiators

- **Real-time updates**—Docs change as soon as code does.
- **AI-powered summaries**—Not just basic auto-generated text, but meaningful explanations.
- **Customizable templates**—Different projects, different styles.
- **DevOps-friendly**—Fits into existing workflows, no need for extra tools.

5. Vision Statement

Making documentation effortless, always up-to-date, and actually useful—so developers can focus on coding instead of writing docs.

Result:

Thus, the product vision document has been made.