Project Requirements Document

# 1. Project Overview

Project Name: Automated Project Planning & Development  
Project Description: This project aims to automate Jira ticket creation from a requirements document, structure a GitHub repository based on Jira tickets, and generate corresponding test cases.

# 2. Objective

1. Automate the creation of tasks and user stories in Jira.  
2. Ensure that tasks are assigned to relevant developers based on project requirements.  
3. Integrate the system with GitHub for automatic repository creation and structuring.

# 3. Functional Requirements

1. Ticket Creation

• Extract requirements from the document and convert them into Jira tickets.  
• Identify key sections like user stories, tasks, and bugs.  
• Each Jira ticket should include:  
 - Title  
 - Description  
 - Assignee  
 - Priority  
 - Due Date

2. GitHub Repository Structuring

• Create a new GitHub repository based on the requirements.  
• Organize the repository into folders based on ticket categories (e.g., Features, Bugs, Documentation).

3. Test Case Generation

• Automatically generate basic test cases based on each user story and task.  
• The test case will include steps to verify functionality and edge cases.

# 4. Non-Functional Requirements

1. Performance

• The system should process the document and create Jira tickets within 10 minutes for documents of up to 200 pages.

2. Security

• API keys for Jira and GitHub must be stored securely and not exposed in the codebase.

# 5. Constraints

• Must use Python 3.x.  
• Dependencies include Jira API, GitHub API, and Hugging Face Transformers for NLP tasks.  
• The project must integrate with the Jira and GitHub platforms securely.

# 6. Acceptance Criteria

• The Jira tickets must be created as specified.  
• The GitHub repository should be structured correctly.  
• The test cases should be generated for all relevant stories and tasks.

# 7. Glossary

• Jira Ticket: An item in Jira representing a task, bug, or user story.  
• GitHub Repository: A GitHub project where the project code is stored.