Project Methodology: Cloud 13

Methodology Selection

Our team has chosen the **Agile Scrum Software Development Methodology** as the foundation for managing the Lockheed - Managing Maintenance Workflow App project. Agile is well-suited for this project due to its adaptability to changing requirements, focus on customer collaboration, and iterative development approach. It allows us to respond to evolving needs and deliver incremental value to our stakeholders.

Planned Artifacts and Activities

- 1. **Sprints**: The project will be divided into time-boxed iterations (sprints) lasting two weeks each, with a Tuesday-Tuesday cycle. Extensions may be considered based on availability and holidays.
- 2. **Backlog Refinement**: Every other Monday (middle of sprints), the team will conduct backlog refinement sessions on Mondays from 6-7 pm to prioritize and manage requirements.
- 3. **Sprint Planning and Retrospectives**: Sprint planning sessions will be held every other Monday (end of sprints) from 6-7 pm. Retrospectives will follow every other sprint after sprint planning ends.
- 4. Working Sessions: On Tuesdays from 5-6:15 pm, the team will engage in working sessions.
- 5. **Sponsor Meetings**: Thursdays from 5-6:15 pm are allocated for sponsor meetings.
- 6. Sprint Demos: During sponsor meetings every other Thursday after a sprint has ended on the Tuesday of that week.
- 7. Standups: The first 5 minutes before every meeting described will include daily stand-up meetings.

Roles

- 1. **Project Manager Saranya Dadi:** Responsible for weekly 4-ups, planning out features, backlogs, sprints, and submitting project-related tasks. Saranya will also meet with the Scrum Master on a regular cadence.
- Scrum Master Nikkia Theodule: Hosts stand-up meetings, meets regularly with the Project Manager, and documents refinement/planning meetings on the Jira board.
- 3. Sponsor Communications Lead Aby Tiet: Responsible for agenda creation and sending a weekly email.
- 4. Front End Lead Annie Tiet: Responsible for approving merges to the main codebase.
- 5. Website Manager Annie Tiet: Responsible for creating and maintaining the team project page for Senior Project deliverables.
- 6. Back End Lead Addo Davies Jr.: Responsible for approving merges to the main codebase.

Standards and Quality Practices

- 1. Continuous Testing: Automated testing will be integrated into the development process to maintain code quality.
- 2. Code Reviews: All code changes will undergo peer reviews to identify and address issues early.
- 3. Definition of Done (DoD): Clearly defined criteria will ensure that a feature is complete and ready for deployment.

Tools

- 1. Project Management: We will utilize Jira to manage our backlog, sprint planning, and task tracking.
- 2. Version Control: Git and GitHub will be used for version control and collaboration.
- 3. Communication: Slack and email will serve as our primary communication platforms for team discussions and updates.

Metrics and Measurements

- 1. **Velocity:** Optimal number of story points that can be worked on by the team. Calculated by averaging the story points of the last 3 sprints.
- 2. Sprint Burndown Chart: Ensure our work is granular enough and are commiting to the right amount of work
- 3. **Epic Progress:** Track the epics being worked on in each sprint to ensure balanced work.
- 4. Testing Code Coverage: Backend code coverage target: 95%
- 5. Blockers/ Dependencies: The timeline will comprise of visual representations of linked and blocked issues.
- 6. Story Points: Expected vs Actual
- 7. Requirements Metrics: % of metrics modified per week