

Sprint 2 Retrospective Meeting

Meeting Chair: Choyon Sarker
Note taker: Lamia Binta Latif

16 November 2024

Attendees

- Nuzhat Nairy Afrin (NN)
- Lamia Binta Latif (LB)
- Yumna Tasneem (YT)
- Choyon Sarker (CS)
- Raian Rashid (RR)

Lamia Binta Latif

What went well:

- Successfully specified and created test cases for the "Place Order" feature.
- Developed the front end for the 'Cancel Order' module and implemented all necessary functions in alignment with TDD.
- Generated and executed comprehensive test cases, ensuring thorough coverage.
- Applied the MVVM architecture with a deeper understanding, achieving a more precise separation of concerns across the model, view, and viewmodel components.
- Adhered to coding standards and successfully generated documentation using KDoc.

What went wrong:

- Faced issues while attempting to connect to the database and retrieve data, which led to the creation of a mock database.
- Encountered test environment crashes that could not be re-established for testing.
- Faced a GitHub error when pushing changes to the 'CancelOrder-LB' branch, requiring the creation of a new branch 'cancelOrderFinal-LB'.
- Struggled with implementing continuous integration, which remains incomplete.

Opportunity for Improvement:

- Improve database connectivity for real-world testing without relying on mock data.
- Enhance the resilience of the test environment, update the Gradle version.
- Strengthen version control practices by troubleshooting GitHub errors and setting up backup branches.
- Complete CI to streamline testing and deployment.

Choyon Sarker

What went well:

- Successfully specified and created test cases for the 'Place Order' feature in line with TDD.
- Developed the front-end for the 'Place Order' feature, ensuring all functions were implemented according to TDD principles.
- Applied the MVVM architectural pattern with greater structure compared to Sprint 1 and adhered to coding standards.
- Created a Git branch 'PlaceOrder-CS' and pushed every minor change to it.
- Successfully created and executed a CI environment for the main Git branch.

What went wrong:

- The test environment crashed due to incompatible Gradle builds during the sprint.
- Merge conflicts occurred due to Gradle and CI integration issues.

Opportunity for Improvement:

- Gain a clearer understanding of using Android Studio and Gradle builds to avoid test environment crashes.
- Improve CI and GitHub Actions implementation, especially for handling pull requests and merge conflicts.

Raian Rashid

What went well:

- Successfully created the 'Pay Bill' functionality and generated several test cases in line with TDD.
- Developed the layout and pushed all changes to the Git branch.

What went wrong:

- Encountered several merge conflicts during the CI process.
- Missing options for different payment methods.

Opportunity for Improvement:

- Implement more payment options for better functionality.
- Push new code updates to the main branch to reduce merge conflicts and improve CI.

Yumna Tasneem**What went well:**

- Designed the UI for the track order functionality and generated test cases for every feature.
- Pushed all related work to the respective GitHub branch.

What went wrong:

- Faced test case failures during the process.
- Encountered merge conflicts in the CI process.

Opportunity for Improvement:

- Add more features to the testing phase and improve CI implementation.
- Push new code updates to the main branch to reduce merge conflicts.

Nuzhat Nairy Afrin**What went well:**

- Successfully implemented the 'Track Stock Levels' module.
- Followed coding standards consistently and generated detailed documentation using KDoc.
- Created and executed multiple test cases using hardcoded and dummy data, ensuring robust functionality and adhering to TDD principles.
- Applied the MVVM architecture more effectively, improving the separation of concerns between the model, view, and viewmodel components.

What went wrong:

- Faced delays in setting up the test environment due to limited knowledge.
- Used dummy data for test cases, limiting real-world accuracy.
- The test environment was unstable due to issues with Android Studio and Gradle bugs.
- Encountered GitHub issues with pushing changes to the 'TrackStockLevels-NN' branch, which required a forced push.
- Struggled with implementing CI, leaving automated testing and deployment incomplete.

Opportunity for Improvement:

- Prioritize resolving database issues and using a more stable solution for smoother integration.
- Improve the resilience of the test environment by reviewing dependencies and upgrading the Gradle version.
- Improve GitHub workflow practices, including synchronization of local and remote branches and handling merge conflicts.
- Complete CI implementation to automate testing and deployment.

Takeaways from the sprint:

- Improve database access for real-world testing, reducing reliance on mock data, and resolve Gradle compatibility issues to ensure stable test environments.
- Complete the CI pipeline using GitHub Actions for automated testing, builds, and deployments, ensuring consistency and reducing manual errors.
- Strengthen version control by managing backup branches, resolving push/pull errors, and establishing routine merges to minimize conflicts.
- Maintain the MVVM structure with clear separation of concerns and continue using KDoc for clean, maintainable documentation.
- Enhance team knowledge of CI setup and test environment management through better knowledge sharing.
- Prioritize automation of testing, builds, and deployments to improve efficiency and reduce errors.