

Report on Contribution to PRAM Edu Mobile App

Submitted as Part of Functional Testing and Software Development Role

1. Objective

The objective of this report is to present how I can contribute to enhancing the PRAM Edu mobile application as a Software Developer and Functional Tester, with a focus on improving functionality, performance, user experience, and reliability.

2. Contribution as a Software Developer

2.1 Enhancing User Experience and Interface Design

- Implement dark mode support to reduce eye strain and improve accessibility.
- Add customizable dashboards for a more personalized user experience.
- Ensure responsive design to support various devices such as tablets and desktops.

2.2 Adding Advanced Features

- Integrate AI-powered recommendations for course suggestions based on user behavior.
- Enable offline access to essential features for low-connectivity scenarios.
- Introduce gamification elements such as achievement badges and leaderboards to boost engagement.

2.3 Performance Optimization

- Optimize backend services to efficiently handle increased user traffic.
- Implement database indexing strategies to speed up data retrieval.
- Conduct regular code refactoring to maintain code maintainability and performance.

3. Contribution as a Functional Tester

3.1 Test Planning and Strategy

- Create comprehensive test cases covering all functional modules of the application.
- Implement automated tests for repetitive scenarios to improve test coverage and efficiency.
- Perform regression testing to ensure new updates do not break existing features.

3.2 User Acceptance Testing (UAT)

- Test real-world usage scenarios to identify usability and functional issues.
- Collect user feedback to detect pain points and improvement areas.
- Perform usability testing to evaluate the intuitiveness of the application.

3.3 Performance and Security Testing

- Conduct load testing to verify the app's stability under high traffic conditions.
- Perform security audits to identify vulnerabilities and fix them proactively.
- Ensure compliance with data protection regulations such as GDPR.

4. Expected Outcomes

- Improved user engagement through enhanced UI/UX and new interactive features.
- Better app performance with faster load times and efficient backend operations.
- Higher reliability and user trust due to thorough functional and security testing.

5. Conclusion

By contributing to the PRAM Edu app as a Software Developer and Functional Tester, I aim to improve both the technical robustness and user experience of the application. This will result in a more engaging, reliable, and efficient tool for educational management.

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