



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SECJ3623

MOBILE APPLICATION PROGRAMMING

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“ PROJECT PROPOSAL ”

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1.Executive Summary:

e-Docs is a cross-platform mobile application built with Flutter aim to centralise internal document submission for reviewing among the employees within the company. This application is designed to streamline the dissemination and management of official documents such as circulars, procedures, quality manuals, work instructions, and organizational policies. The system will enhance accessibility, ensure version control, and support compliance with quality standards.

2.Background:

Currently, document distribution relies heavily on printed materials and email, leading to version inconsistencies, limited accessibility, and inefficient updates. A centralized mobile platform will resolve these issues by enabling secure, real-time access to verified documents.

3.Objectives:

- Provide a mobile platform for accessing official documents.
- Ensure documents are consistently updated and easily searchable.
- Support version control and audit trails.
- Facilitate timely dissemination of circulars and policy updates.

4.Scope:

- Mobile app for Android and iOS.
- Admin portal for uploading and managing documents.
- Smart search and filtering by category.
- Push notifications for new or updated documents.

5.Mobile Interface:

- User-friendly interface with categorized document sections: Circulars, Procedures, Quality Manuals, Policies.
- Search and bookmark functionality.
- Push notifications for new releases.
- Offline access for downloaded documents.

6.Employee Staff:

- Project Manager
- UI/UX Designer
- Frontend/Backend Developer
- Database Administrator (DBA)

7. Software Process Model:

Agile development with bi-weekly sprints: Sprint Planning → Development → Testing → Review → Deployment. User feedback incorporated at each phase.

8. Budget:

| Component | Cost (MYR) |
|--------------------------|------------|
| Development | N/A |
| UI/UX Design | N/A |
| Infrastructure & Hosting | N/A |
| QA & Testing | N/A |
| Training & Documentation | N/A |
| Total | N/A |

9. System Architecture:

- Frontend: Flutter
- Backend: Laravel REST API
- Database: PostgreSQL
- Document Storage: Google Drive
- Authentication: OAuth 2.0 with role-based access

10. Risks Assessment:

- Data security breaches → Mitigation: encryption and access control.
- Budget constraints → Mitigation: phased implementation and modular rollout.
- User resistance → Mitigation: training and ongoing support.

11. Resources:

- Development tools: Android Studio, VS Code, GitHub, Figma, Draw.io
- Cloud services: Firebase
- Documentation: Notion, Confluence.
- Testing: TestFlight, Postman.

12. Technical Specifications:

- Minimum OS: Android 10+, iOS 13+
- API: RESTful with JSON format
- Storage: 5GB per user
- Performance: Document load time <2 seconds
- Security: AES-256 encryption, JWT tokens

13. Timeline and Deliverables:

| Phase | Duration | Key Deliverables |
|-----------------------|----------|-----------------------------------|
| Planning & Design | 2 weeks | Wireframes, Requirements Document |
| Development | 6 weeks | Mobile App (Alpha), Backend API |
| Testing & QA | 2 weeks | Bug Reports, Security Audit |
| Deployment & Training | 2 weeks | Final App, User Manual, Training |

14. Conclusion:

The e-Docs application will serve as a centralized, secure, and efficient platform for managing and distributing official documents. It supports digital transformation, improves operational transparency, and ensures compliance with