ZEROVAEGA TECHNOLOGIES

MAKER–CHECKER

ENTERPRISE DOCUMENT APPROVAL PLATFORM

Digitizing Enterprise Approval Workflows for the Mobile Workforce



CLIENT / DOMAIN	PROJECT TYPE	ENGAGEMENT
Enterprise ERP Doc. Mgmt	Mobile Application (Android)	End-to-End Product Build

01 EXECUTIVE SUMMARY

Zerovaega Technologies designed and delivered the Maker–Checker Mobile Application, an enterprise-grade workflow solution that replaces desktop-bound ERP approval cycles with a secure, role-based mobile experience. Integrated with client ERP systems via REST APIs, the platform lets a "Maker" create, upload and submit documents, and a "Checker" review, comment on and approve them from anywhere — cutting approval turnaround time while preserving a complete, auditable trail.

02 THE CHALLENGE

- Heavy dependency on desktop ERP systems limited flexibility for remote managers.
- Manual, in-person approvals caused delayed decision-making.
- Little to no real-time visibility into document / approval status.
- Weak role-based access control over who could create, review or approve.
- Fragmented handling of multiple document formats and approval records.

03 THE SOLUTION

- Centralized mobile app with secure, role-based Maker / Checker access.
- End-to-end document upload, review, commenting and approval workflow.
- Real-time ERP synchronization through secure REST APIs.
- Full approval history and audit trail for every document.
- JWT authentication, RBAC and encrypted local storage.

04 KEY BENEFITS

- Faster Approvals
- Work from Anywhere
- Secure Approvals
- Real-time Synchronization
- Complete Transparency
- Enterprise-grade Security

TRANSFORM MANUAL ERP APPROVALS INTO SECURE MOBILE WORKFLOWS

01 DOCUMENT WORKFLOW

MAKER

1. Login
2. Dashboard
3. Upload Doc
4. Add Details
5. Attach Files
6. Submit
7. Track / Resubmit

CHECKER

1. Login
2. Dashboard
3. View Pending
4. Open Doc
5. Review Comment
6. Approve / Reject / Revert

02 KEY CAPABILITIES

Authentication & Security
Email/password login, session mgmt, RBAC, secure logout.

Role-Based Dashboards
Live counts of pending, approved, rejected & reverted docs.

Document Upload (Maker)
Multi-file upload with department, category & priority tags.

My Documents (Maker)
Search, filter, track status, view comments, resubmit.

Approval Management
Checker queue with search, filters, sort & uploader info.

In-App Document Viewer
PDF, image, Word & Excel viewing with zoom and download.

Review & Approval Workflow
Comment, approve, reject or revert with confirmation & history.

ERP Synchronization
Bi-directional REST API sync for real-time status updates.

03 TECHNOLOGY STACK

Mobile App	Flutter (Android & iOS-ready)
Language	Dart
State Mgmt	GetX
API Layer	Dio / REST APIs
Doc. Viewer	Native PDF / Office Viewer
Auth & Security	JWT + Role-Based Access Control

ARCHITECTURE HIGHLIGHTS

- Modular Flutter app: Auth, Dashboard, Upload, Viewer, Workflow, Profile.
- Secure REST integration for data sync, authorization & workflow updates.
- Enterprise-grade security layer: JWT, RBAC, encrypted storage, session timeout.

04 RESULTS & VALUE DELIVERED

Faster Approvals
Mobile-first workflow shrinks approval cycle time vs. desktop ERP.

Full Transparency
Real-time status tracking and complete approval history for every document.

Stronger Governance
Role-based access ensures only authorized users create, review or approve.

05 FUTURE ROADMAP

- Push notifications for submissions, approvals, rejections & reminders.
- Analytics-driven insights into approval performance and bottlenecks.
- Digital signatures and intelligent document automation.

06 CONCLUSION

The Maker–Checker Mobile Application demonstrates Zerovaega Technologies' ability to turn a manual, desktop-bound approval process into a secure, scalable enterprise mobility solution — laying the foundation for further digital transformation through notifications, analytics and intelligent automation.