

# SavAppStore Documentation:

## Purpose

SavAppStore is a centralized internal app distribution and version management system designed for SavMoney and Savana Fibre.

It acts as a Private App Store for all apps used by different departments within the Savana, supporting UAT/ TestFlight, QA and Production environments.

## Objectives

- Establish a centralized platform for all organizational apps.
- Enable secure upload and version control of internal applications.
- Allow staff to view, download, and update the latest app versions.
- Mimic modern app store behavior within an access-controlled enterprise ecosystem.
- Provide a foundation for future API integration with internal systems and staff devices.

## Users and Roles

*Admin:* Manages uploads, user profiles, and versions.

*Staff User:* Can view, download, and update apps. E.g. An Agent can update their app as long as a new

## Core Features

Admin Features:

- Secure login and session management.
- Upload applications with metadata such as app version, app platform e.g. ios, android
- Manage and delete apps

Staff Features:

- View and download available and up-to-date apps.
- Get notified when new versions of the apps are available/ uploaded to the SavAppStore.

## Technology Stack

Frontend: JSP + HTML, Tailwind CSS Backend: Java Servlets (Jakarta EE)

Database: PostgreSQL

Web Server: Apache Tomcat 9 OS/Deployment: Ubuntu Cloud Server Security: Session-based Authentication

## System Architecture

User Interface → Servlets (Controller Layer) → PostgreSQL Database Deployed on Apache Tomcat running on Ubuntu.

## Database Schema( data dictionary )

users(id, username, password, role)

uploaded\_files(id, file\_name, file\_path, uploaded\_by, app\_name, app\_version, app\_platform, app\_type, uploaded\_at)

## Security and Authentication

Session-based authentication using HttpSession. Passwords hashed using SHA-256 or bcrypt. Access control for admin and staff users.

## API Integration

- POST `/download` → Request payload: { organisation; "SavMoney", current\_version: 14.2, user\_id: 172832, devicetype: "android", deviceId: 1712023032, timestamp: 2025-10-10 }

## Future Enhancements

- REST API integration with internal apps - Mobile client for downloads
- Push Notifications for the device users to update their app versions.
- Auto-update mechanism from the server and device where the app is installed.

## Deployment and Hosting

Server OS: Ubuntu 22.04 LTS

App Server: Apache Tomcat 9

Database: PostgreSQL 15

Deployment Path: `/var/lib/tomcat9/webapps`

File Storage: `/opt/savappstore/uploads`