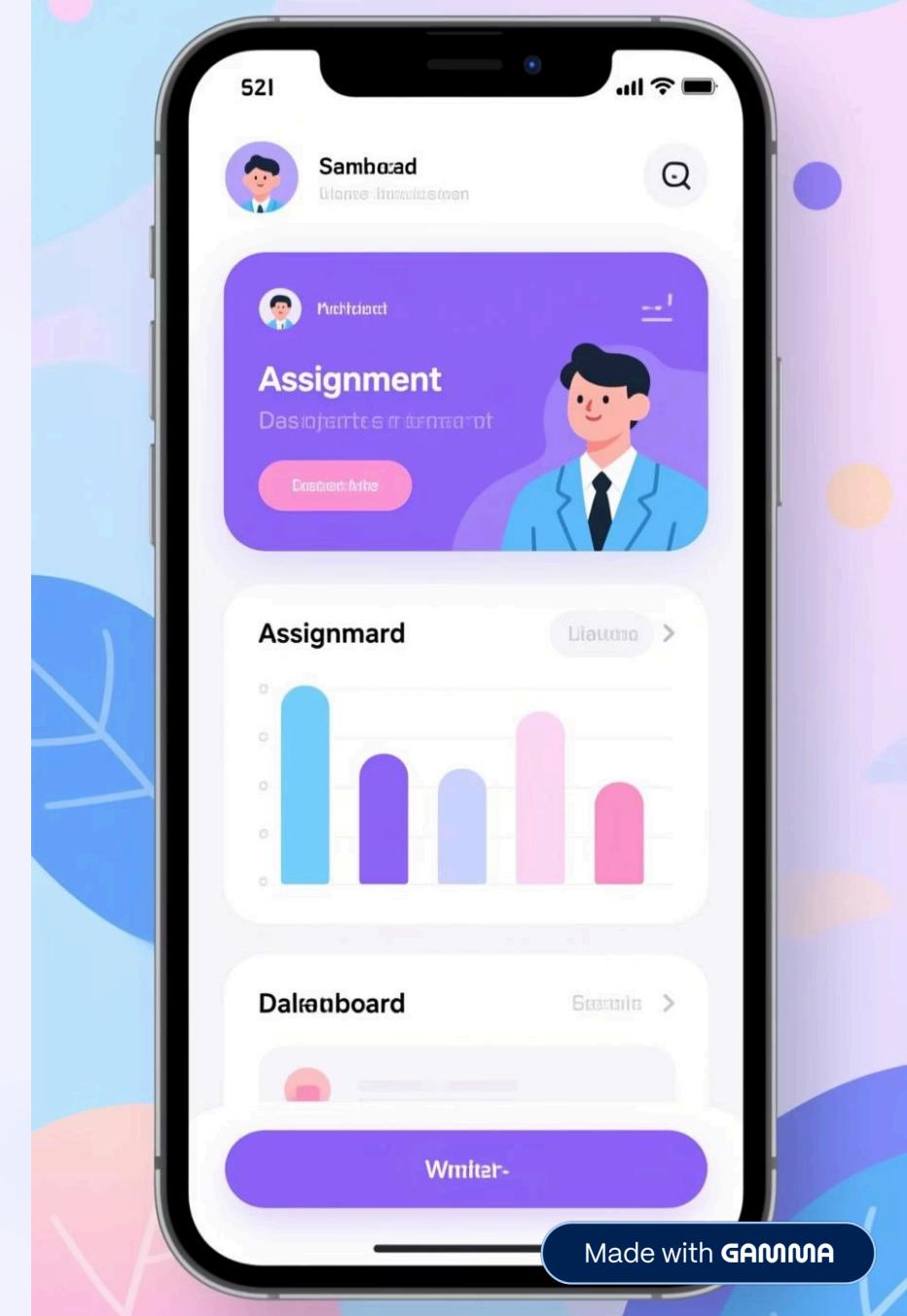


# Assignment Management System

A mobile-first application built with Base44 for streamlined assignment workflow and real-time collaboration



# Transforming Academic Workflow

The Assignment Management System is a comprehensive mobile-first solution that digitizes the entire assignment lifecycle. Built exclusively on the Base44 platform, it connects teachers and students through an intuitive interface that handles creation, submission, evaluation, and feedback in real-time.

This system eliminates manual tracking bottlenecks while providing transparency and accountability for all stakeholders.

## Core Capabilities

- Role-based access control for teachers and students
- Real-time submission tracking and notifications
- Secure authentication and data management
- Responsive mobile-first design
- Automated feedback and status updates



# Project Goals and Vision

## Digitize Workflow

Transform paper-based assignment processes into a seamless digital experience that saves time and reduces errors.

## Real-Time Feedback

Enable instant communication between teachers and students with automated notifications and status tracking.

## Secure Access

Implement role-based permissions ensuring data privacy and appropriate access for all users.

## Efficient Management

Provide comprehensive dashboards for monitoring progress, submissions, and evaluation metrics at a glance.

# User Roles and Permissions



## Admin (Teacher)

Full control over assignment creation, student management, submission review, and evaluation. Teachers access comprehensive analytics and can provide detailed feedback on all submissions.

## Student

Access to assigned tasks, submission portal, status tracking, and feedback viewing. Students receive real-time notifications and can monitor their progress across all assignments.

# Teacher Dashboard Capabilities

01

## Secure Authentication

Login with Base44 authentication ensuring data security and role verification

03

## Submission Review

Access all student submissions in one centralized interface for efficient evaluation

05

## Progress Tracking

Monitor overall assignment completion rates and class performance metrics

02

## Assignment Management

Create, update, and delete assignments with titles, descriptions, and deadlines

04

## Status Updates

Mark submissions as Pending, Pass, or Fail with detailed feedback comments

06

## Automated Notifications

Students receive instant alerts when assignments are reviewed or status changes

# Student Portal Experience

1

## Registration & Login

Create account and authenticate securely through Base44 authentication system

2

## Assignment Dashboard

View all assigned tasks with deadlines, descriptions, and current status at a glance

3

## Submit Work

Upload assignments as text, code snippets, or file links directly through the interface

4

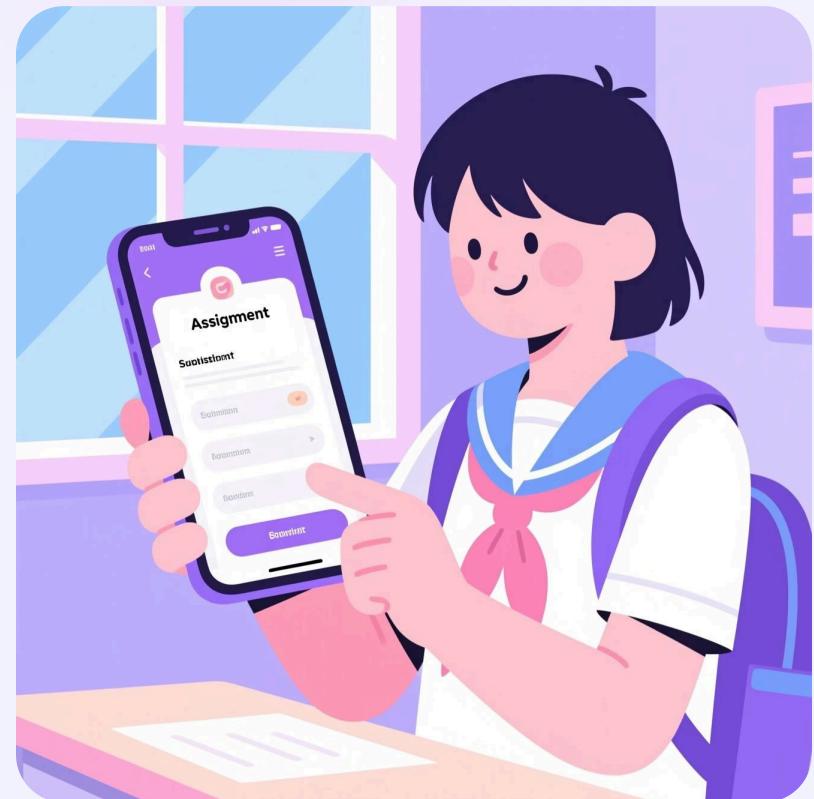
## Track Progress

Monitor submission status in real-time: Pending, Pass, or Fail with feedback

5

## Receive Feedback

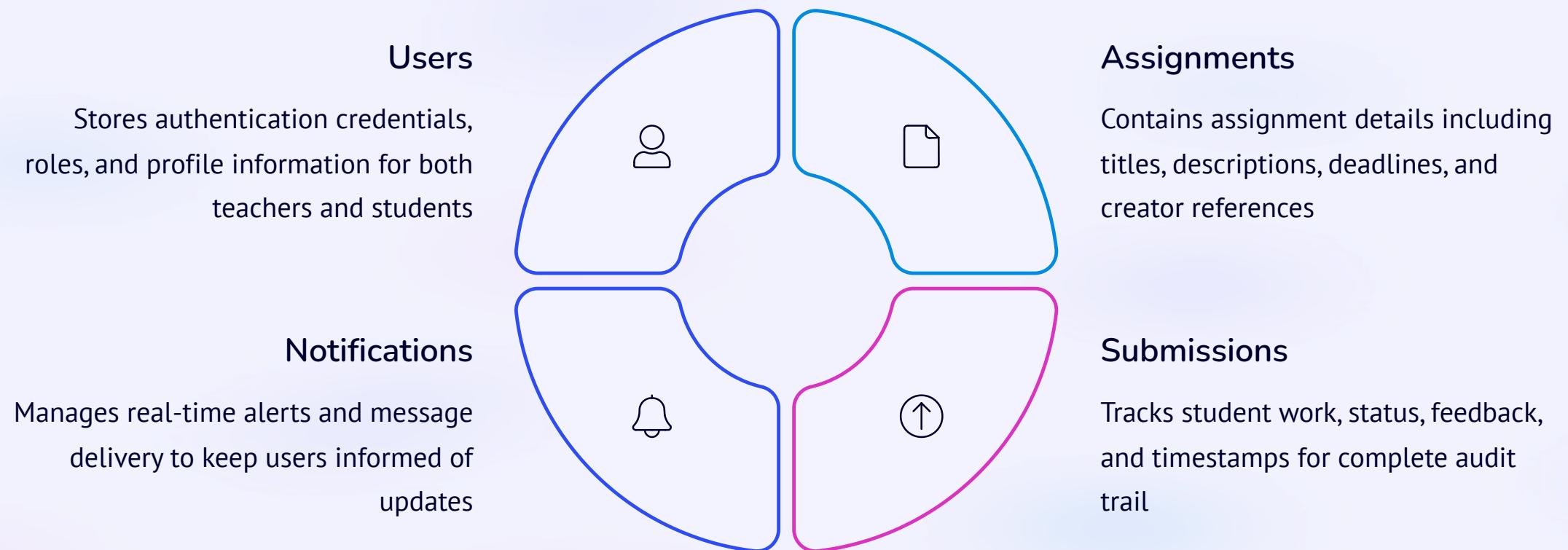
Access detailed teacher comments and evaluation notes for continuous improvement



The student experience is designed for simplicity and clarity, ensuring quick access to assignments and transparent communication with instructors.

# Data Architecture Overview

The system leverages four interconnected data models to manage the complete assignment workflow, ensuring data integrity and efficient queries.



# Data Model Specifications

## Users Table

Field	Type	Purpose
id	UUID	Unique identifier
name	String	Full name
email	String	Login credential
password	Encrypted	Base44 auth
role	Enum	admin/student

## Submissions Table

Field	Type	Purpose
id	UUID	Unique identifier
assignment_id	UUID	Links to assignment
student_id	UUID	Links to student
submission_content	Text	Student work
status	Enum	pending/pass/fail
feedback	Text	Teacher comments
submitted_at	DateTime	Submission time
reviewed_at	DateTime	Review time

## Assignments Table

Field	Type	Purpose
id	UUID	Unique identifier
title	String	Assignment name
description	Text	Instructions
deadline	DateTime	Due date/time
created_by	UUID	Admin reference
created_at	DateTime	Creation timestamp

## Notifications Table

Field	Type	Purpose
id	UUID	Unique identifier
user_id	UUID	Recipient reference
message	String	Notification text
is_read	Boolean	Read status
created_at	DateTime	Delivery time



# Application User Flows

## Student Journey

- 1 Authentication**  
Register new account or login with existing credentials
- 2 Browse Assignments**  
View complete list of assigned tasks with deadlines
- 3 Submit Work**  
Upload assignment content through intuitive form
- 4 Track & Review**  
Monitor status and read feedback from teachers

## Admin Journey

- 1 Secure Login**  
Authenticate with admin credentials via Base44
- 2 Create Tasks**  
Design assignments with descriptions and deadlines
- 3 Review Submissions**  
Evaluate student work and provide detailed feedback
- 4 Update Status**  
Mark as Pass/Fail and trigger automatic notifications



# Project Summary and Deliverables



## Fully Functional App

Complete mobile-first application with role-based dashboards and end-to-end assignment workflow



## Secure Architecture

Base44 authentication, role-based access control, and API-level security enforcement



## Scalable Technology

Built entirely on Base44 platform: authentication, database, UI builder, and API layer

## Key Benefits

- Simplifies assignment management workflow
- Improves transparency and communication
- Reduces manual tracking overhead
- Provides real-time feedback mechanism
- Suitable for academic and institutional deployment

## Technical Highlights

- Mobile-first responsive design
- Card-based intuitive UI components
- Status badges for visual clarity
- Automated notification system
- Clean, maintainable codebase

 **Demo Ready:** The Assignment Management System is fully operational and ready for academic review, stakeholder demonstration, or proof of technology evaluation. Questions welcome!