BudgetKit Work Breakdown Structure V2

Last Updated: December 25, 2025

- **1. Preparation**
  - **1.1. Project Document**
    - 1.1.1. API Specification
    - 1.1.2. Coding and Commit Guidelines
    - 1.1.3. Use Case
    - 1.1.4. User Story
  - **1.2. Web Host**
    - 1.2.1. Hosting Plan
    - 1.2.2. Domain Name
    - 1.2.3. Github Auto Deployment (Main Branch)
  - **1.3. Design**
    - **1.3.1. Application Mockup**
      - 1.3.1.1. User Profile
      - 1.3.1.2. Analysis Dashboard
      - 1.3.1.3. Transaction Dashboard
      - 1.3.1.4. Main Dashboard
      - 1.3.1.5. Authentication Page
    - **1.3.2. Database Design**
      - 1.3.2.1. Physical Design

- **2. Development**
  - **2.1. Frontend**
    - **2.1.1. Authentication**
      - 2.1.1.1. Login/Logout
      - 2.1.1.2. Register
      - 2.1.1.3. Email Verification
      - 2.1.1.4. Reset Password
      - 2.1.1.5. Session Management
      - 2.1.1.6. Security Validation
    - **2.1.2. Main Dashboard**
      - 2.1.2.1. Onboarding Page
    - **2.1.3. Transaction Dashboard**
      - 2.1.3.1. Transaction List
      - 2.1.3.2. Add Transaction
      - 2.1.3.3. Edit Transaction
      - 2.1.3.4. Delete Transaction
      - 2.1.3.5. Filter Transaction
    - **2.1.4. Budgets Dashboard**
      - 2.1.4.1. Budget List
      - 2.1.4.2. Set Budget
      - 2.1.4.3. Edit Budget
      - 2.1.4.4. Delete Budget

2.1.5. Savings Dashboard
- 2.1.5.1. Saving List
- 2.1.5.2. Set Saving Goal
- 2.1.5.3. Edit Saving Goal
- 2.1.5.4. Delete Saving Goal
- 2.1.5.5. Search Saving Goal

2.1.6. Categories Dashboard
- 2.1.6.1. View Categories List
- 2.1.6.2. Add Category
- 2.1.6.3. Edit Category
- 2.1.6.4. Delete Category

2.1.7. Reports Dashboard
- 2.1.7.1. View Charts & Summary

2.1.8. Settings Dashboard
- 2.1.8.1. Account Setting
- 2.1.8.2. Security Setting
- 2.1.8.3. Notification Setting

2.1.9. AI Chatbot
- 2.1.9.1. Side Conversation

2.2. Backend

2.2.1. API Implementation

2.2.1.1. Authentication
- 2.2.1.1.1. User Signup
- 2.2.1.1.2. User Login
- 2.2.1.1.3. Check Username
- 2.2.1.1.4. Check Email
- 2.2.1.1.5. Verify Email
- 2.2.1.1.6. Forgot Password
- 2.2.1.1.7. Validate Reset Token
- 2.2.1.1.8. Reset Password
- 2.2.1.1.9. Change Password

2.2.1.2. User Profile
- 2.2.1.2.1. Get Profile
- 2.2.1.2.2. Update Account
- 2.2.1.2.3. Deactivate Account
- 2.2.1.2.4. Delete Account

2.2.1.3. Transactions
- 2.2.1.3.1. List Transactions
- 2.2.1.3.2. List with Categories
- 2.2.1.3.3. Create Transaction
- 2.2.1.3.4. Update Transaction
- 2.2.1.3.5. Delete Transaction
- 2.2.1.3.6. Expense Summary
- 2.2.1.3.7. Income Summary
- 2.2.1.3.8. Monthly Reports

2.2.1.4. Budgets
- 2.2.1.4.1. List Budgets

2.2.1.4.2. Get Budget
2.2.1.4.3. Create Budget
2.2.1.4.4. Update Budget
2.2.1.4.5. Delete Budget
2.2.1.4.6. Get Budget Transaction
2.2.1.5. Savings
2.2.1.5.1. List Savings
2.2.1.5.2. Get Saving
2.2.1.5.3. Create Saving
2.2.1.5.4. Update Saving
2.2.1.5.5. Delete Saving
2.2.1.5.6. Add Saving Transaction
2.2.1.5.7. Get Saving Transaction
2.2.1.6. Categories
2.2.1.6.1. List Categories
2.2.1.6.2. Create Category
2.2.1.6.3. Update Category
2.2.1.6.4. Delete Category
2.2.1.7. Notifications
2.2.1.7.1. List Notifications
2.2.1.7.2. Get Unread Count
2.2.1.7.3. Mark Read
2.2.1.7.4. Mark All Read
2.2.1.7.5. Delete Notification
2.2.1.8. AI Chatbot
2.2.1.8.1. Send Message

2.2.2. DevOps/CI-CD
2.2.2.1. Github Actions Setup
2.2.2.1.1. Workflow Config
2.2.2.1.2. Build Pipeline
2.2.2.1.3. Test Automation
2.2.2.1.4. Deployment Pipeline
2.2.2.2. Environment Config
2.2.2.2.1. Dev Enviroment
2.2.2.2.2. Staging Environment
2.2.2.2.3. Production Environment
2.2.2.2.4. Environment Variables

3. Testing
3.1. Test Matrix
3.1.1. Functional Testing
3.1.1.1. iBudget Features **(Frontend)**

3.1.2. UI Testing
3.1.2.1. Responsive Design
3.1.2.2. Consistent Page Design

3.2. Frontend Testing (Automated)
3.2.1. Unit Tests (Jasmine/Karma)
3.2.2. Component Tests
3.2.3. Service and Integration Tests
3.3. Github Actions Workflows
3.3.1. CI Workflow Setup
3.3.2. Test Automation Pipeline
3.3.3. Coverage Report Generation

4. Deployment
4.1. Integration of Github Repository to Web Host
4.1.1. Webhook Setup
4.2. Database Setup
4.2.1. Import Database
4.3. Host Web App to Internet
4.3.1. User Review