BudgetKit Work Breakdown Structure

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.** **User Profile**
    - 2.1.1.1. Setup Username
    - 2.1.1.2. Setup Profile Picture
    - 2.1.1.3. Setup Full Name
    - 2.1.1.4. Account Settings
  - **2.1.2.** **Analysis Dashboard**
    - 2.1.2.1. View Charts, Summary & Analysis
  - **2.1.3.** **Transaction Dashboard**
    - 2.1.3.1. Expense and Income Card List
  - **2.1.4.** **Main Dashboard**
    - 2.1.4.1. Dashboard Layout/UI
    - 2.1.4.2. Category Budget Limits
    - 2.1.4.3. Navigation Menu and Quick Actions Panel
    - 2.1.4.4. Data Visualization Components
    - 2.1.4.5. Summary Widgets
  - **2.1.5.** **Authentication**
    - 2.1.5.1. Login/Logout Functionality
    - 2.1.5.2. User Registration System
    - 2.1.5.3. Email Verification
    - 2.1.5.4. Password Reset Flow
    - 2.1.5.5. Session Management

     2.1.5.6. Security Validation

2.2. Backend

2.2.1. API Implementation

2.2.1.1. User Account

     2.2.1.1.1. profile.php
     2.2.1.1.2. profile_edit.php
     2.2.1.1.3. forgot_password.php
     2.2.1.1.4. reset_password.php
     2.2.1.1.5. settings.php
     2.2.1.1.6. update_settings.php

2.2.1.2. Login/Logout

     2.2.1.2.1. index.php
     2.2.1.2.2. login.php
     2.2.1.2.3. register.php
     2.2.1.2.4. Logout.php

2.2.1.3. Dashboard

     2.2.1.3.1. main_dashboard.php
     2.2.1.3.2. analysis_dashboard.php
     2.2.1.3.3. Transact_dashboard.php
     2.2.1.3.4. add_transaction.php
     2.2.1.3.5. update_transaction.php
     2.2.1.3.6. Delete_transaction.php

2.2.1.4. configuration.php

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

3. Testing

3.1. Test Matrix

3.1.1. Functional Testing

     3.1.1.1. Registration
     3.1.1.2. Logging In
     3.1.1.3. Logging Out
     3.1.1.4. Edit Profile
     3.1.1.5. Update Setting
     3.1.1.6. Forgot & Reset Password
     3.1.1.7. CRUD Transaction

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