FinDash: Technical Documentation

Project Overview

FinDash is a client-side financial dashboard web application built with HTML, CSS, and JavaScript. It helps users track finances, expenses, and savings goals through an intuitive interface with data visualization capabilities.

Technology Stack

Frontend: HTML5, CSS3, JavaScript (ES6+)

• **Data Visualization**: Chart.js

• Data Storage: LocalStorage (user data), SessionStorage (authentication)

• Icons: Font Awesome

• Typography: Google Fonts (Poppins)

Project Structure

```
findash/
├─ src/
    — css/
      └─ style.css
                           # Main stylesheet
       └─ script.js # Main JavaScript file
     - images/
                           # Image assets
     index.html
     index.ncmabout.htmlproducts.html
                           # Home page
                           # About page
                          # Products & Services page
     - login.html
                            # Login/SignUp page
     dashboard.html
                            # Dashboard
```

Key Components

1. Navigation

- Consistent navbar across all pages
- Dynamic links based on authentication state
- Mobile-responsive design

2. Authentication System

- Client-side user registration and login
- Data stored in localStorage for persistence
- Session management via sessionStorage

3. Dashboard

- Financial overview with summary statistics
- Account tracking with balance history charts
- Transaction list with categorization
- Budget visualization using doughnut charts
- Savings goals with progress indicators

4. Styling

- Consistent design system with CSS variables
- Responsive layout using flexbox and grid
- Modular CSS organization by component
- Mobile-first approach with media queries

HTML Structure

Each page follows a consistent structure:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <!-- Meta tags, title, and stylesheets -->
</head>
<body>
    <header>
        <!-- Navigation bar -->
    </header>
    <main class="main-content">
        <!-- Page-specific content -->
    </main>
    <footer>
        <!-- Footer content -->
    </footer>
    <!-- JavaScript files -->
</body>
</html>
```

CSS Architecture

CSS Variables

```
:root {
    /* Colors */
    --primary-color: #4a90e2;
    --accent-color: #50e3c2;
    --dark-text: #333333;
    --light-text: #7c8798;
```

```
--secondary-color: #5e6c84;
--light-bg: #ffffff;
--border-color: #e6e9ef;

/* Shadows */
--shadow: 0 4px 12px rgba(0, 0, 0, 0.1);
}
```

Key Styling Components

- Layout: Combination of flexbox and grid systems
- Components: Modular card, button, and form styles
- Responsive Design: Media queries for tablet and mobile devices

JavaScript Functionality

Core Features

1. Authentication Logic

- User registration with localStorage persistence
- Login verification and session management
- o Conditional UI rendering based on auth state

2. Dashboard Functionality

- Data visualization with Chart.js
- Dynamic content loading and updates
- Interactive financial components

Pages Overview

Home (index.html)

Landing page with marketing content and feature highlights.

About (about.html)

Company information, core values, and team overview.

Products (products.html)

Service offerings with pricing plans and feature comparisons.

Login (login.html)

User authentication with login and signup forms.

Dashboard (dashboard.html)

Main application interface with financial management tools.

Security Considerations

This is a front-end demonstration project with several security limitations:

- Passwords stored in plain text (not hashed)
- Client-side data storage vulnerable to tampering
- No server-side validation

For Production Use: Implement proper authentication backend, password hashing, and server-side validation.

Responsive Design

- Mobile-first approach with breakpoints at 768px and 1100px
- Fluid layouts using relative units (%, rem)
- Responsive grids with auto-fit and minmax
- Flexible images and media