**1. Project Objective**

To develop a web application that serves as an interactive gallery of CSS/HTML effects, allowing users to preview, copy, and reuse the code. The site targets:

* Students and educators in frontend development,
* UI/UX designers,
* Frontend developers looking for ready-made solutions,
* Technical demonstrations during lectures or meetups.

**2. Key Business Goals**

* **Simplify access** to visual effects (CSS, animations, hover, 3D, etc.).
* **Increase user engagement** through an interactive interface (modals, previews).
* **Ensure scalability** by allowing new categories and templates to be added.
* **Enable code export and reuse** (copy/download options).
* **Showcase development skills** (for portfolio, thesis defense, etc.).

**3. Business Functions (Current and Planned)**

**Already Implemented:**

* Effect categories: Picture, Text, Animation.
* Modal window to preview effect code.
* Auto-generation of HTML pages with caching.
* Effect list with preview thumbnails.
* Separate “Solution” page for displaying code in table format.

**Required for a Full Website:**

**🔧 Content Management**

* **Admin panel**:
  + CRUD interface to add/edit/delete effects.
  + Upload preview images and insert HTML/CSS code.
  + Categorize effects by type, difficulty, and use-case.

**🔎 User Features**

* **Search and filter** by effect name, category, and tags.
* **Download effect** as .html or .zip.
* **One-click code copy**.
* **Responsive design** for mobile devices.
* **Dark/light mode** toggle.

**🌐 UI and Navigation**

* Full main menu for navigation between sections.
* "About", "Contact", and "Help" pages.
* Multilingual support (RU / EN).

**👥 User Interaction**

* **User registration and login**.
* Ability to save favorites.
* Comments or feedback on effects.
* Rating system (likes/stars).

**📊 Analytics and SEO**

* **Google Analytics** or similar tracking.
* **SEO optimization**: meta-tags, headings, sitemap.
* **"Popular Effects"** page based on view stats.

**💾 Technical Enhancements**

* Switch database to PostgreSQL or MySQL.
* Use REST API or GraphQL for effect data access.
* Server-side and client-side caching (e.g., Redis + LocalStorage).
* Integrate with CDN for faster asset loading.

**4. Risks and Limitations**

* Without authentication, access is limited to public viewing only.
* Without moderation, potentially harmful code could be submitted (if expanded).
* SQLite is suitable for local or educational use, not for production.

**5. Expected Outcomes**

* A fully functional demo site with a large collection of effects.
* A tool for teaching and demonstrating CSS/HTML animation concepts.
* A foundation for a future startup/project in the UI libraries space.