**StepTags 1.1**

**1. Overview**

StepTags is a modern, lightweight application for individuals and teams to plan and execute work through structured projects, steps, and substeps.  
Key differentiators:

* AI (ChatGPT/LLM) integration to automatically generate project plans as step/substep hierarchies with notes and due dates.
* Fully responsive (mobile & desktop).
* Flicker-free and real-time.
* Free-tier hosting and backend.

**2. User Onboarding & Authentication**

* **Landing Screen**:  
  Header with app name (left), “Register” and “Log In” buttons (right).  
  Welcome message: “Welcome to StepTags, please log in to continue.”
* **Register Options**:
  + **Email**: Name, email, password. Confirmation email, then redirect to login → Projects page.
  + **Google**: Redirect via Google Accounts, then Projects page.

**3. Projects Dashboard & Creation**

* **Projects List**:  
  Columns: Project Name, Assigned To, Due Date, Current User Role.  
  Buttons: “Create New Project” and “Create New Project with AI.”
* **Empty State**:  
  If no projects, display centered “Create new project” button with column headers.
* **Create Project Modal**:  
  Fields: Title (unique), Description, Due Date, Members, Items, Assigned To, Background.

**4. Project Settings & Overview**

* **Settings Modal**:  
  Project info at top, left pane for actions (Edit, Members, Items, Delete), right pane for details.  
  Always visible Save/Cancel.

**5. Users**

* **Roles**:
  + Admin: Full control.
  + Member: Full CRUD except global settings.
  + Guest: View only.
* **Profile Fields**: Name, Email, Avatar.
* **Authentication**: Google OAuth + Email.
* **Invitations**: Email invitation or in-app.

**6. Projects**

* **Properties**: Title, Description, Due Date, Members, Items, Assigned To, Background.
* **Ownership**: Creator = Admin.
* **Visibility**: Only invited users.
* **Deletion**: Soft delete for 30 days.

**7. Steps**

* **Properties**: Name, Notes, Due Date, Assigned To, Status, Colors, Overdue Warning, Index, Comments, Items.
* **Ordering**: Insert below or bottom, move up/down, drag-and-drop, flag important.
* **Creation/Editing**: Modal for new, right-pane for editing.

**8. Substeps**

* Same as Steps but scoped under parent Step.
* Indented view, collapsible by default.

**9. Items**

* Types: Text or File.
* Status: Present/Absent (for text only).
* Attachments: Admin/Member can attach to Steps.

**10. Filtering & Search**

* Filters: Status, tag, assignee, due date.
* Search: By step name/notes or substep name.

**11. Calendar**

* Shows steps/substeps with due dates.
* Color-coded (red overdue, yellow near overdue, gray completed).

**12. Chat**

* Project-wide, real-time.
* Plain text, auto-link URLs.
* Admins can delete.

**13. AI-Assisted Project Creation**

* User enters prompt + deadline.
* ChatGPT generates project title, steps, substeps.
* User reviews/edits before saving.

**14. Notifications**

* Real-time notifications for assignments, comments, overdue items.
* Badge in top bar.
* User can mute per project.

**15. Edge Cases & Rules**

* Simultaneous edit locks.
* Removing users updates assignments.
* Duplicate names prevented.
* Soft delete visible to Admin only.

**16. Mobile Responsiveness**

* Fully responsive, supports drag and arrow ordering.

**17. Technology & Hosting**

* **Hosting**: Vercel.
* **Version control**: GitHub.

| **Layer** | **Tech** |
| --- | --- |
| **Frontend** | Pure HTML5, Tailwind CSS (CDN), Feather Icons, Flatpickr, SortableJS |
| **Backend / DB** | Supabase (PostgreSQL + Auth + Storage + RLS) |
| **Storage Buckets** | avatars, project-files (private, served via signed URLs) |
| **Auth** | Supabase Auth (email + Google OAuth) |
| **Realtime** | Supabase Channels (listen on steps table) |
| **Style Goal** | Clean UI, glass / gradient / blurred cards, mobile-first |
| **JS Modules** | All ESM, imported via <script type="module" src="..."> |
| **No frameworks** | (No React, Vue, Svelte — just vanilla JS + modules) |