

# Birthday & Anniversary Reminder Web App – Project Plan

## Objective

To develop a **free, web-based birthday and anniversary reminder app** that helps users store important dates, sends timely email reminders, and displays **playful, celebratory animations** in an interactive UI. This app aims to make special occasions unforgettable, while also being a personal, customizable, and fun experience.

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## Core Features

### User Authentication & Security

- Secure login and registration system using Django's built-in Auth.
- User sessions with CSRF protection.
- Only authenticated users can access or manage their reminders.
- Secure storage and access control for user-uploaded media (images, voice messages) via Supabase.

### Reminder System

- Add and manage birthdays and anniversaries.
- Customizable reminder options:
  - One day before
  - One week before
  - On the same day
- Email notifications via **SendGrid**.
- Option to disable email reminders.

- Option to add events to Google Calendar (later enhancement).
- **Multi-user collaboration:** Share event reminders with family or friends.

## Interactive & Themed UI

- **Landing Page:** "I have something for you... Guess what day is today?" with hugging GIF animation.
- **Event Display Page:** Celebrates the event with animated visuals.
- **Cake-Cutting Animation:** A jiggly cake-slicing Lottie animation.
- **Celebration Page:** Greeting card featuring:
  - Uploaded image
  - Handwritten-style message
  - Notebook-style visual theme
- **Page Navigation:** Smooth "page-turning" animation for browsing cards/events.
- **Celebration Effects:** Balloons, confetti, and sparkles triggered on special days.

## Special Features

- **Surprise Mode:** Plays a special animation when a user logs in on their own birthday or anniversary.
- **Voice Message Option:** Record short messages that are sent as links via email.
- **Personalized Themes:** Change background, font, and UI color schemes.
- **"This Day in History":** Display interesting events from the same calendar date.
- **Background Music:** Enable/disable birthday tunes on the event screen.
- **Reusable Messages:** Save and reuse commonly used wishes (like "Happy Birthday, bro!").
- **Optimized Lottie Animations:** Smooth performance on all devices.
- **CDN Integration:** Fast loading via Supabase CDN for images/audio.

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# Tech Stack & Tools

Component	Tool/Framework
Backend	Django + Django REST Framework
Frontend	Django Templates (React optional)
Database	MongoDB (Render), SQLite (dev)
Authentication	Django Auth System
Email Service	SendGrid API
Media Storage	Supabase Storage (images, audio)
Hosting	Render (Free Tier)
Task Scheduling	Django Q
Animations	Lottie

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# Development Plan

## Phase 1: Planning & Design

- Design database schema:
  - Users
  - Events (birthday, anniversary)
  - Reminders
  - Media uploads
- Create wireframes for:
  - Landing Page
  - Event Detail Page
  - Greeting Card Page

- Settings/Preferences
  - Choose Lottie animations & layout style.
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## **Phase 2: Backend Development**

- Initialize Django project with DRF setup.
  - Implement:
    - User authentication (login/register)
    - CRUD for events
    - Reminder logic with user preferences
    - SendGrid integration for email
  - Implement Django Q for scheduled email sending.
  - Build API endpoints for media upload to Supabase.
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## **Phase 3: Frontend Development**

- Create responsive templates with Django or use React.
- Implement:
  - Animations (confetti, cake-cutting, balloons)
  - Surprise Mode detection
  - Event timeline UI
  - Handwritten font styles for cards
  - Background music toggle
- Set up theme switcher (light/dark/personalized themes).
- Add smooth page transitions.

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## Phase 4: Testing & Deployment

- Unit and integration tests for:
  - Event creation
  - Email sending
  - User authentication
  - Media uploads
- Manual test across devices and browsers.
- Deploy backend and DB on **Render**.
- Setup Supabase access and CORS.
- Optional: Connect to custom domain.

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## To-Do (Post MVP)

- Add **Privacy Policy** page.
- Add **Terms of Service**.
- Enable push notifications (via browser).
- Add Google Calendar integration.
- Progressive Web App (PWA) for mobile users.
- Admin dashboard for content moderation (optional).
- Export data (download calendar/reminders as PDF or CSV).

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## Conclusion

This app will offer users a **delightful experience**, balancing utility and celebration. With email notifications, a beautiful interface, and optional customization, it turns simple reminders into joyful interactions—making sure no special day is ever forgotten again.