

SmartInvite

Simplifying Digital Invitation Creation through Modern UI and Template Libraries

Abstract

The Event Invitation Creator App is a cross-platform application designed to simplify the process of designing, customizing, and sharing digital invitations for personal and professional occasions. It enables users to create visually appealing invitations through a library of ready-made templates, custom design tools, and image upload features. The app allows exporting in multiple formats such as JPEG, PNG, and PDF, along with one-click sharing through WhatsApp, email, and social media platforms. Its primary objective is to make invitation creation intuitive, fast, and accessible to a broad audience including individuals, families, and corporate event planners. Built with scalability, security, and responsiveness in mind, the project leverages modern web and mobile technologies to offer a smooth design and sharing experience while laying the foundation for future enhancements such as AI-generated templates, RSVP tracking(optional), and advanced design tools.

Introduction

Event invitations play a crucial role in personal and professional communication, and the shift toward digital platforms has created demand for easy-to-use invitation design tools. The Event Invitation Creator App addresses this need by providing an all-in-one solution for designing, customizing, and distributing event invites. It eliminates the dependency on manual design tools or expensive third-party services by combining high-quality templates, flexible customization features, and instant digital sharing options.

Users can browse event-specific categories such as weddings, birthdays, or corporate gatherings, select templates, and personalize them with text, colors, and uploaded images

through a drag-and-drop editor. The app's intuitive design ensures that even non-technical users can create professional-grade invitations in minutes. Future versions will integrate advanced functionality such as RSVP tracking(optional), guest management, and AI-based template recommendations — enhancing both usability and engagement for diverse user groups.

Technologies Using:

Component	Technology	Description
Frontend (Web & Mobile)	React (Web), React Native (Android & iOS)(optional)	Provides a unified and responsive user experience across web and mobile platforms
Backend	Java (Spring Boot)	Handles core API services, business logic, and user session management. Ensures scalability and RESTful communication
Database	PostgreSQL	Stores user profiles, event details, and template metadata with transaction safety and relational consistency
Cloud Storage	AWS S3 or Google Cloud Storage	Used for storing user-uploaded images and custom invitation files securely with access control

Authentication	OAuth2 (Google, Apple, Email/Password)(optional)	Manages secure sign-in and user identity verification with industry-standard OAuth2 protocol
Hosting & Deployment	Google Cloud Platform (GCP)	Provides a scalable and reliable cloud infrastructure for API hosting and database management