Project Report: Friends Form Database

# 1️ Project Title

Friends Form Database & Online Hosting Using Firebase

# 2️ Objective

The goal of this project is to build a simple, user-friendly web application that collects friends’ information through a form and stores it securely in an online database using Firebase. The project demonstrates the full workflow — frontend, database integration, and live hosting — using modern web tools.

# 3️ Tools & Technologies Used

|  |  |
| --- | --- |
| Part | Technology |
| Frontend | HTML, CSS, JavaScript |
| Backend | Firebase SDK (serverless backend) |
| Database | Firebase Firestore (NoSQL, cloud) |
| Hosting | Firebase Hosting (HTTPS, CDN) |
| Dev Tools | VS Code, Node.js, Firebase CLI |

# 4️ Project Steps

✅ Created an HTML form with fields — Name, Email, Phone Number.

✅ Wrote JavaScript to capture form input and handle the Submit event.

✅ Set up a Firebase project in the Firebase Console.

✅ Connected the frontend to Firebase using the Firebase SDK (compat version).

✅ Configured Firestore as the cloud database to store form entries.

✅ Tested the data submission — data was saved successfully to Firestore.

✅ Installed Node.js and Firebase CLI.

✅ Initialized Firebase Hosting, configured the project, and deployed the site live.

✅ Verified live hosting and checked submitted data through the Firebase Console.

# 5️ How it Works

• User Experience:  
 The user fills in their name, email, and phone number and clicks Submit.

• Data Handling:  
 The form’s JavaScript uses Firebase SDK to send the data directly to Firestore.

• Database:  
 Firestore stores each submission as a new document inside the friends collection.

• Live Hosting:  
 The entire site is deployed to Firebase Hosting with a secure https:// link.

• Data Access:  
 The collected data can be viewed, managed, or exported through the Firebase Console.

# 6️ Output

✅ Working online form

✅ Live deployed link: [<https://friendsformproject.web.app/>]

✅ Data stored securely in Firebase Firestore

# 7️ Applications

• Personal friend database

• Contact form for a portfolio or website

• College project demo for learning full-stack basics

• Can be extended with authentication, admin dashboard, or Google Sheets integration.

# 8️ Learnings

Through this project, the following skills were demonstrated:  
• Building a responsive web form  
• Using Firebase Firestore for real-time data storage  
• Using Firebase Hosting for secure deployment  
• Debugging and using npm, Node.js, and Firebase CLI  
• Understanding frontend-backend-database integration

# 9️ Conclusion

This project shows how beginners can use modern cloud tools to build, store, and host real-world web applications easily, securely, and efficiently.