Project Closure and Recap Form

This form should be completed after reaching the final milestone and upon completing your project at the end of the semester. A single form must be submitted by each team.

First, please fill the following entries with information about your project:

• Group #: **5**
• Group Members: **Rishika Gudise, Alexa Sievert, Pavi Premsai, Nishi Upadhay, Megan Lambrecht-Scasny**
• Site URL: https://wibalumnisearch.web.app/#
GitHub Repo: https://github.com/rishikagudise/sprint_2/tree/main

Next, engage in self-reflection by addressing the following questions:

1. What worked well, and why?

Something that worked well in our project was how we split up the work for each of the milestones. Some of us had more technical skills than others, while others excelled in the project management area. We used these different skill sets to our advantage and split work according to what we each excel in. For example, the more technically savvy members worked more efficiently with coding tasks while the other members took more responsibility with building diagrams and organizing the conceptual information.

2. What didn't work well, and why not?

An aspect of this project that felt a bit weak was the initial coordination around setting up our technical environment and version control. While we ultimately divided tasks effectively, it took us some extra time at the beginning to ensure everyone had access to the necessary tools and was comfortable with processes like pushing code updates or testing features locally. This slight delay was mostly due to different experience levels with the tools we chose, and it highlighted the importance of establishing a strong shared foundation early on.

3. If you were to do the same project again, what would you do differently?

If we were to do the same project again, we would dedicate more time upfront to standardizing our technical setup and agreeing on workflows. Creating a clear checklist for environment setup, version control practices, and basic coding conventions would have helped us avoid small delays and confusion early on. Additionally, we would schedule more frequent, shorter check-ins throughout the milestones to catch issues sooner and keep momentum steady, especially as our technical pieces started to integrate.

4. What are your takeaways after completing the project?

One of the biggest takeaways from this project is the importance of communication and planning when working on a technical project as a team. Even when individual tasks are divided well, the overall success depends on how clearly everyone understands how their pieces fit together. We also realized how valuable it is to stay flexible — at different points, team members stepped up to help with tasks outside their original role, which helped us stay on track. Finally, on the technical side, this project showed us how critical it is to build applications with scalability and organization in mind, especially as more features are layered in over time.

5. Describe a scenario that you thought would be hard to go through, but it turned out to be easier than originally thought. Describe another for the other way around.

One scenario we anticipated would be difficult was integrating the front-end pages with the Firebase backend. We expected challenges in connecting real-time data across multiple collections and located on different pages throughout the website. However, once we established a clear structure and broke it down into smaller functions, connecting the backend was easier than expected.

On the other hand, implementing authentication and permission rules turned out to be much more challenging than we initially expected. We assumed that since the permissions did not involve many lines of code and that the rules were easy to articulate, they would be simple to set up. However, we quickly realized that properly configuring Firestore security rules requires a deep understanding of how authentication tokens interact with document paths and how to structure conditions for read/write access. Even minor misconfigurations led to access errors or unintended data exposure.

6. Have you shown your project to people outside your class? What was the impression?

We have shown our project to people outside of our class, such as other business school students. The response to our website was overwhelmingly positive. Many people stated how this website is something they could see themselves implementing in their own business organizations, as it is a tangible way for members to gain value from past members in their clubs. They also said that our website was visually impressive.

7. What other features would you like to add if you have more time?

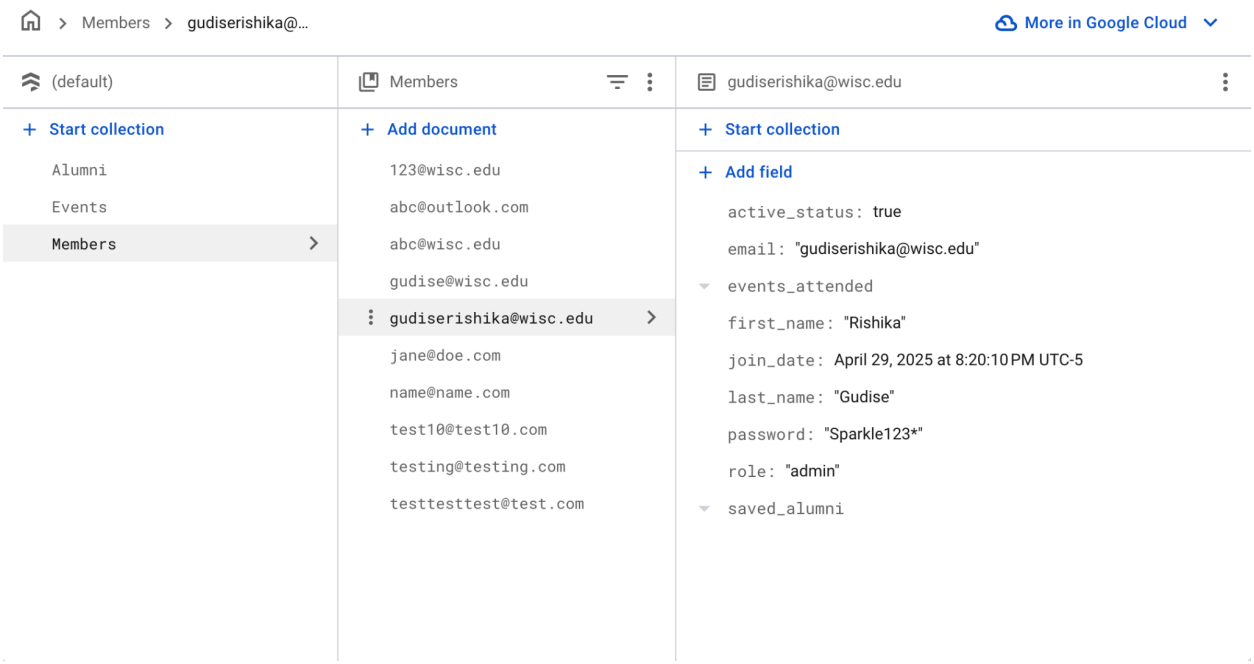
If we had more time, we would have loved to experiment with integrating an Excel plugin or a Google Sheets API connection. This feature would allow the alumni database to be automatically updated whenever a new class of students graduates. By linking a dynamic spreadsheet maintained by university staff or the student organization, the system could seamlessly ingest new alumni records without requiring manual data entry, ensuring that the platform remains current and scalable over time.

8. Anything else you want to say?

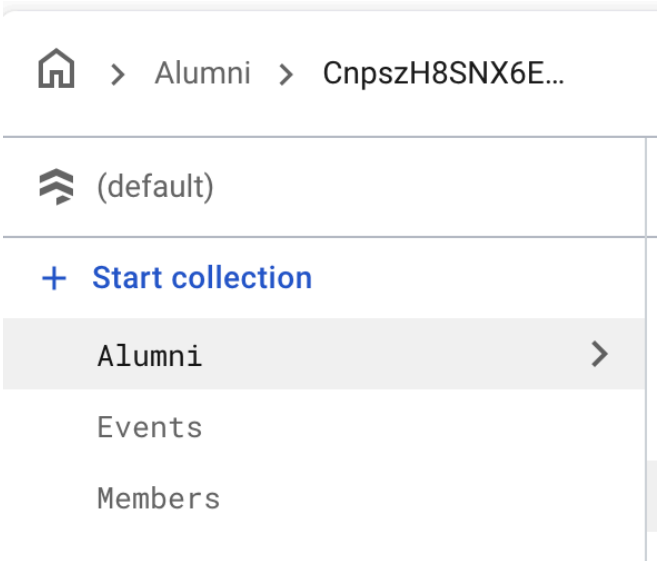
We really tried to establish the correct version of the security rules but due to a lot of complications that arose when implementing the security rules, we decided to leave them in their default version for the sake of simplicity. (Everything regarding the website functionality works but once we added our security rules, there were too many bugs arising as a result). We did, however, copy and paste the security rules that should have been working below as our "attempt" at creating the correct rules.

Lastly, capture multiple screenshots from your personal Firebase account to illustrate the following points. Attach your screenshots after the corresponding items below.

1. Show your existing users

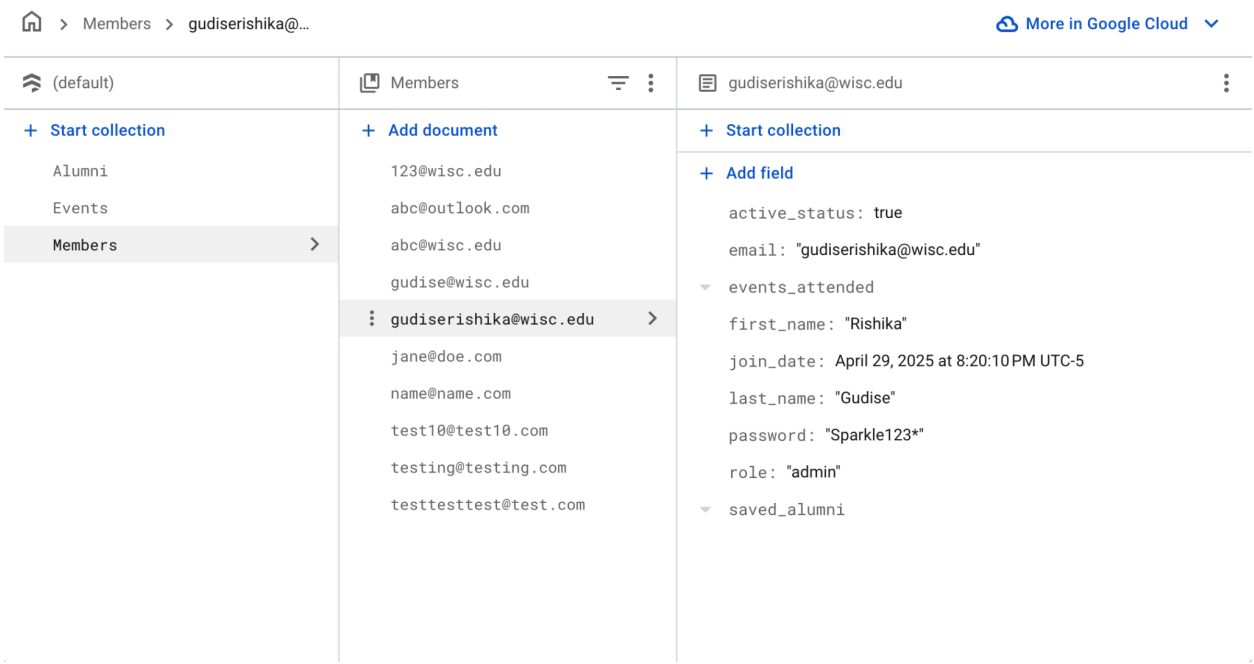


2. Show a comprehensive list of all your collections.

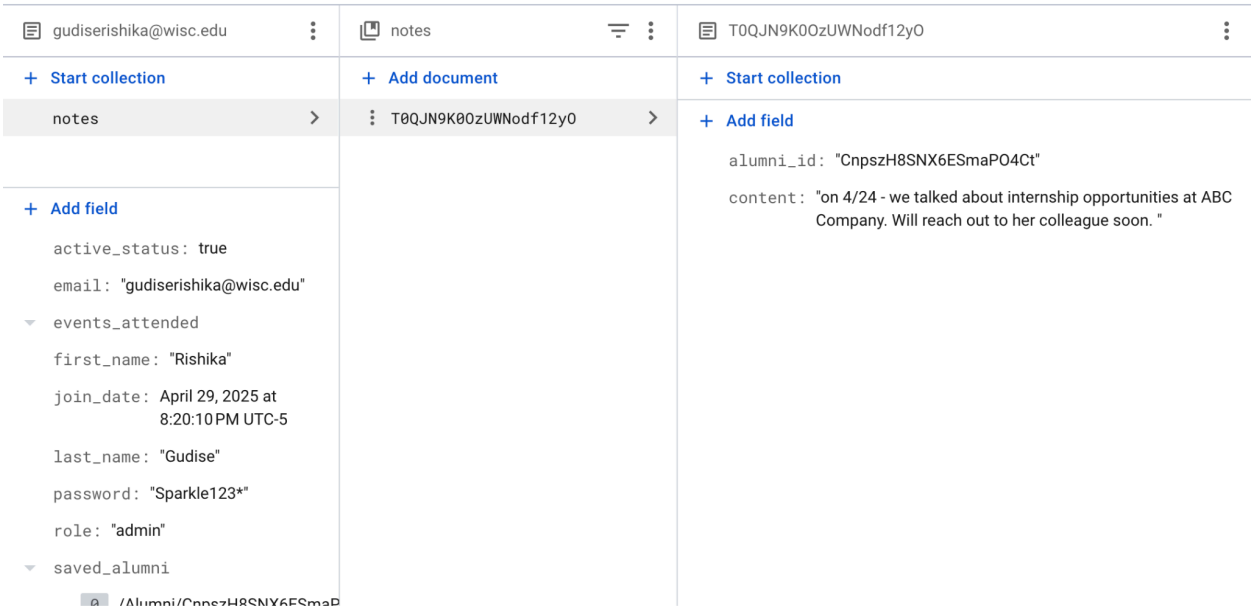


3. Show a sample document from each of your collections. For example, if you have 3 collections, provide 3 corresponding screenshots.

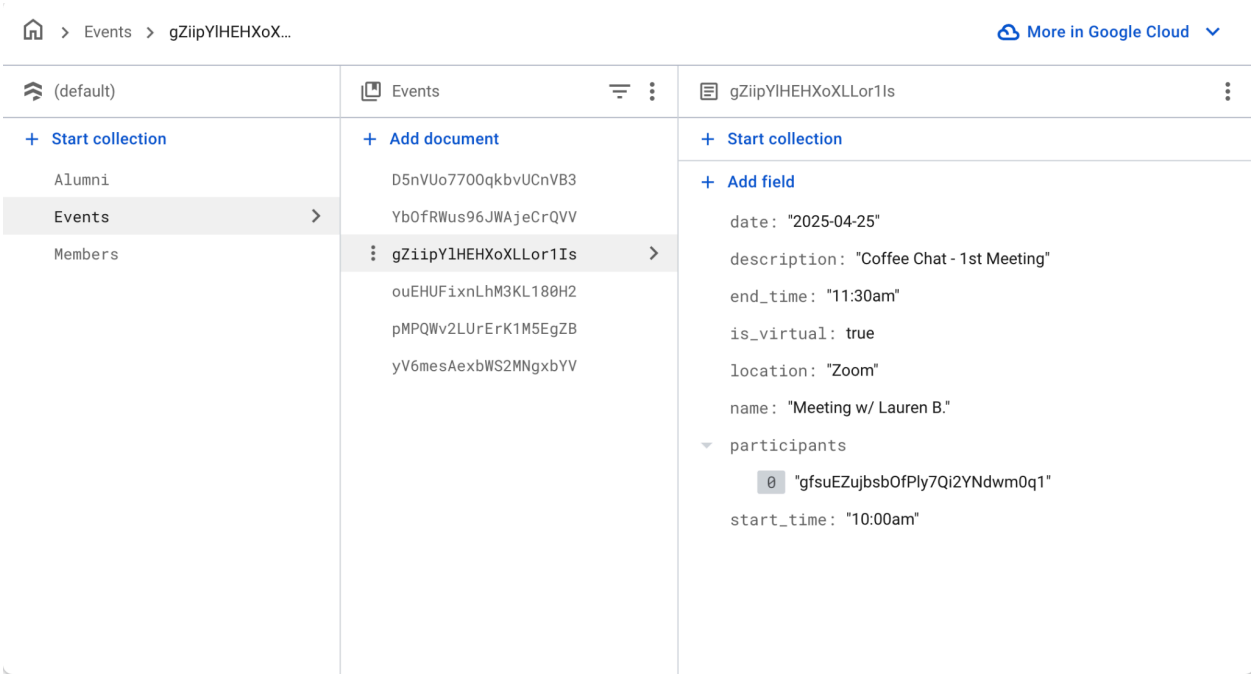
Members Collection:



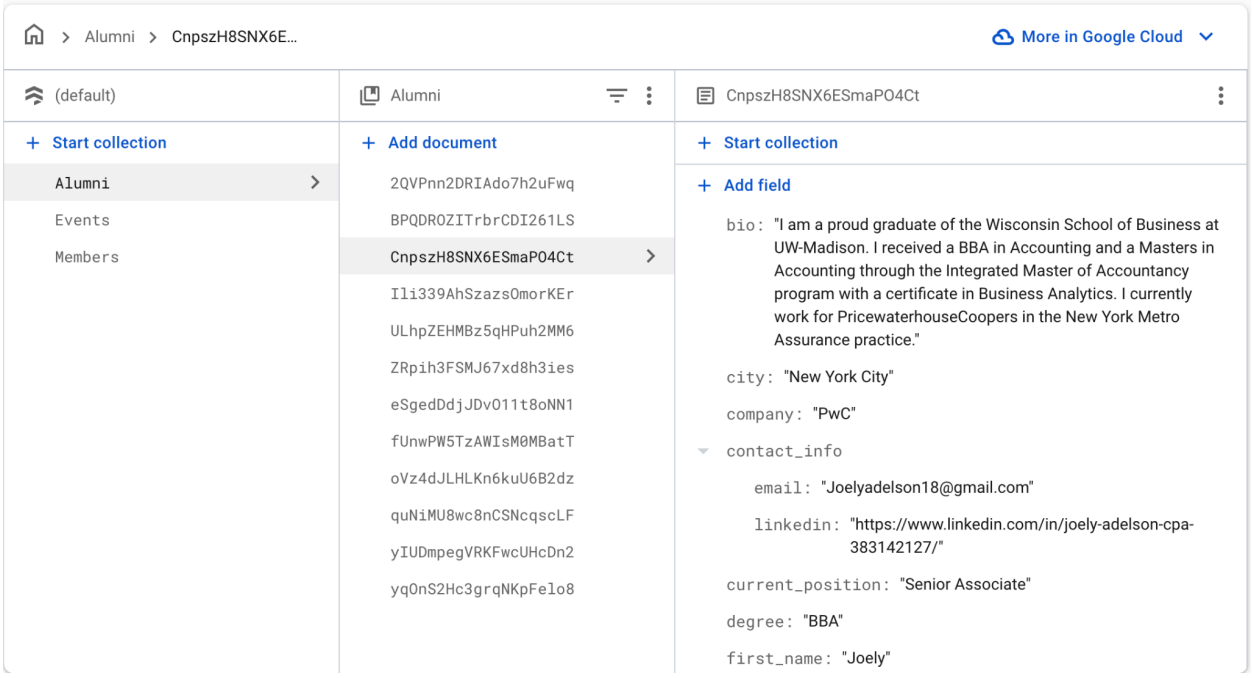
Notes (a subcollection for every Doc in the Member's collection):

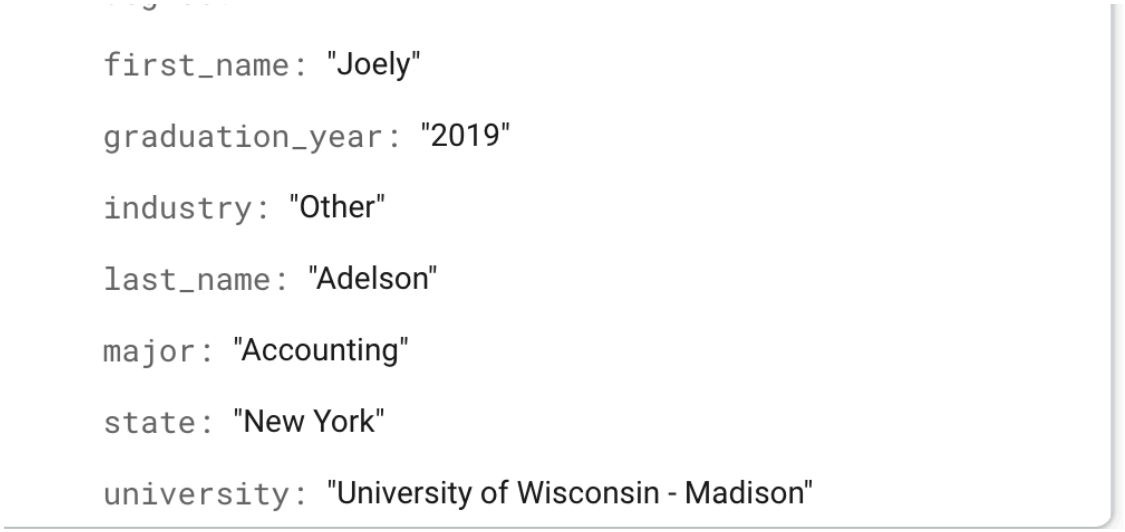


Events Collection:



Alumni Collection:





4. Show your security rules configuration.

```
rules_version = '2';
service cloud.firestore {
  match /databases/{database}/documents {

    // Members Collection
    match /Members/{memberEmail} {
      allow read, write: if request.auth != null &&
                    request.auth.token.email == memberEmail;

      // Notes Subcollection
      match /notes/{noteId} {
        allow read, write: if request.auth != null &&
                      request.auth.token.email == memberEmail;
      }
    }

    // Alumni Collection
    match /Alumni/{alumId} {
      allow read: if request.auth != null;

      allow write: if request.auth != null &&
        get(/databases/$(database)/documents/Members/$(request.auth.token.email)).data.role ==
"admin";
    }

    // Events Collection
    match /Events/{eventId} {
      allow read, write: if request.auth != null;
    }
  }
}
```