

# Final Project

**Project Participants:** Veronica Padon

**Title:** GlobeTales Exchange

Git Hub: [https://github.com/veropadon/Final\\_Project\\_Globetales\\_Exchange.git](https://github.com/veropadon/Final_Project_Globetales_Exchange.git)

Video URL: [https://1drv.ms/v/s!ApFv1sv1-lqYrkKf8\\_HDN6zXBRf7?e=sx3yNt](https://1drv.ms/v/s!ApFv1sv1-lqYrkKf8_HDN6zXBRf7?e=sx3yNt)

Summary: A digital town square where people from different parts of the world set up stalls to showcase their cultural treasures. For instance, a school in Mexico sets up a profile (stall) on GCEP to display their vibrant Day of the Dead celebrations. They're keen on sharing this experience and look for exchange opportunities. Across the digital square, a school in Japan, known for its Cherry Blossom Festival, shows interest. They mutually create an Exchange Proposal, allowing students from Mexico to experience the Cherry Blossom in Japan and vice versa. Behind the scenes, GCEP uses a structured system to keep everything organized. The details about the Mexican school, their cultural activities, and the exchange with the Japanese school are stored in specific sections (or database tables) named Community Profile, Exchange Proposal, and Cultural Asset. If the Mexican school wishes to update their profile of their latest Day of the Dead celebration, Globe Tales Exchange tools allow them to do so easily. And to ensure everything works smoothly, all these operations are checked and tested using a tool called ARC (AdvancedRestClient).

Initial Features:

**Initial Features:**

**Community Profiles:**

Register and set up a new community/school profile. Display unique cultural assets and highlights. Search and view other community profiles.

**Exchange Proposals:** Initiate new cultural exchange proposals. View ongoing and past exchange proposals. Accept or decline exchange proposals from other communities.

**Cultural Assets Library:** Upload and categorize written cultural assets (stories, folklore, recipes). View and explore cultural assets shared by other communities. Comment and interact with shared cultural assets.

**Communication Hub:** Direct messaging system for communities to communicate. Notification center for updates on proposals and assets. Analytics Dashboard: Track number of exchanges, popular cultural assets, and community interactions. Planned Features by Deadline: Complete setup for community profile registration and management. Full implementation of the exchange proposal system. Creation of the text-based cultural assets library with upload and view capabilities. Basic communication hub with messaging and notifications. Initial analytics dashboard setup with basic tracking metrics. API Endpoints for Features:

Stretch Goals (to be completed if time allows, or after graduation): Multilingual Support: Implement a translation feature to make the platform accessible in various languages. Automatically translate cultural assets to the user's preferred language. Advanced Search and Filters: Allow users to search cultural assets based on specific tags, regions, or content type. Implement filters for more refined search results. Interactive Map Integration: Embed a global map to visually represent communities and their cultural assets. Enable users to explore cultural assets by clicking on geographical regions. User Ratings and Reviews: Allow users to rate and review cultural assets, providing feedback and increasing engagement. Use these ratings to highlight top-rated cultural content. Integration with Social Media: Allow communities to link and showcase their social media profiles. Implement sharing features to promote cultural assets on platforms like Facebook, Twitter, and Instagram. Secure File Upload: Allow communities to securely upload PDFs or other document formats, expanding the types of cultural assets shared. Implement stringent security measures to prevent malicious uploads

**Stretch Goals** (to be completed if time allows, or after graduation):

**Multilingual Support:** Implement a translation feature to make the platform accessible in various languages. Automatically translate cultural assets to the user's preferred language.

**Advanced Search and Filters:** Allow users to search cultural assets based on specific tags, regions, or content type. Implement filters for more refined search results.

**Interactive Map Integration:** Embed a global map to visually represent communities and their cultural assets. Enable users to explore cultural assets by clicking on geographical regions.

**User Ratings and Reviews:** Allow users to rate and review cultural assets, providing feedback and increasing engagement. Use these ratings to highlight top-rated cultural content.

**Integration with Social Media:** Allow communities to link and showcase their social media profiles.

Implement sharing features to promote cultural assets on platforms like Facebook, Twitter, and Instagram.

**Secure File Upload:** Allow communities to securely upload PDFs or other document formats, expanding the types of cultural assets shared. Implement stringent security measures to prevent malicious uploads.

**Entities: Community** - Create, Read, Update, Delete

**Proposal** - Create, Read, Update, Delete

**Asset** - Create, Read, Update, Delete

**Communication** - Create and Read

**Entities: Community:** Represents individual communities or schools

**Proposal:** Represents exchange proposals between communities

**Asset:** Represents cultural assets, such as stories, traditions, and recipes.

**Communication:** Represents messages and other communication between communities.

**One-to-many relationship:** Community to Proposal: One community can have multiple exchange proposals, but each proposal is specifically tied to a single community. For instance, the school in Mexico might have proposals with the school in Japan, another with a school in France, and another with a school in Australia. Each of these proposals is unique to the Mexican school, hence a one-to-many relationship from Community (one) to Proposal (many). Many-to-many relationship: Community to Asset: A single community can showcase multiple cultural assets, and an individual cultural asset can be associated with multiple communities. For instance, the tradition of celebrating a harvest festival might be common across communities in India, the US, and Canada. Each of these communities will list this as an asset, but the asset itself doesn't belong uniquely to any single community.

This necessitates a **many to-many relationship between Community and Asset**. To facilitate this many-to-many relationship in a relational database, we would typically have a junction table, which might be called CommunityAsset.

This table would contain foreign keys to both the Community and Asset tables and would represent each pairing of a community with an asset. CRUD Operation on Many-to-many relationship: An example CRUD operation : Create: Add a new association between a community and an asset. For example, when the Mexican school adds the "Day of the Dead" celebration as one of their cultural assets, a new record will be