

# Product Backlog



## Updated User Stories

1. As a front-end developer, I want to be able to retrieve articles from multiple Wikipedia languages via API, so that I can obtain data for translation comparisons.
  - Size: 3
  - Priority: High
  - Precondition: The requested language is supported by the Wikipedia API
  - Post condition: The article content is visible to user in a specific language
2. As a front-end developer, I want to request translations for the page I am displaying to the end users, so that they can view alternate versions of a page that they can understand.
  - Size: 3
  - Priority: Medium
  - Precondition: Articles in other languages have been fetched from Wikipedia
  - Postcondition: The translated article is available

**Epic: As a front-end developer, I want to request content suggestions and semantic comparisons via the API from the LM so that I can present users with a comparison view of the original and translated content.**

3. As a back-end developer, I want to configure middleware for API access so that I can ensure secure access to data.
  - Size: 8
  - Priority: Medium
  - Precondition: Rules exist for middleware specifications (CORS handling, API key management, etc.).
  - Postcondition: The APIs are secured to only allow certain domains, types of requests, and authorized users.
4. As a back-end developer, I want to store content from both Wikipedia and the LM, so that I can perform comparisons between the original article and the LM-generated content to identify semantic differences.
  - Size: 5
  - Priority: Medium
  - Precondition: Wikipedia articles and LM translations have been successfully retrieved
  - Postcondition: The semantic comparison results indicate whether the translation is valid.
5. As a back-end developer, I want to ensure that APIs align with the front-end team's requirements so that the data delivered is in a format that can be seamlessly integrated into the UI, ensuring a consistent and efficient user experience.

- Size: 3
- Priority: High
- Precondition: HTTP API request endpoints are already defined
- Postcondition: API requests are functional for the front-end

**Epic: As a backend developer, I want an API so that I can communicate with other components of the system consistently and reliably.**

6. As a back-end developer, I want an API that retrieves both the original and LM-translated versions of an article so that other developers can request content for comparison.
  - Size: 5
  - Priority: Medium
  - Precondition: Both original article content from Wikipedia and the translated content from the LM are available
  - Postcondition: Both the original and LM-translated articles are usable by front-end developers.
7. As a back-end developer, I want consistent response structures across all endpoints so that consuming services can reliably use the data.
  - Size: 3
  - Priority: High
  - Precondition: All API endpoints have been implemented.
  - Postcondition: Every API endpoint returns responses in a standardized JSON format as defined in the API specifications.
8. As a back-end developer, I want error-handling mechanisms that return meaningful error responses so that consuming services can gracefully handle failures.
  - Size: 5
  - Priority: High
  - Precondition: API endpoints are in place and operational.
  - Postcondition: Each endpoint returns standardized error responses (with appropriate HTTP status codes and descriptive error messages) when failures occur.
9. As a back-end developer, I want logs of incoming requests and outgoing responses so that I can debug issues and monitor API behavior.
  - Size: 3
  - Priority: Medium
  - Precondition: API endpoints are live and handling traffic
  - Postcondition: API requests and responses are recorded in a centralized logging system.

**Total size: 38**

## Updated Glossary

- **Wikipedia:** A free online encyclopedia where people can read and edit articles in many languages. In this project, Wikipedia is used as the main source for retrieving articles for translation and comparison.
- **UI – User Interface:** An interactive graphical representation of the program and data that allows users to interact with the system.
- **LM – Language Model:** A machine-learning model using algorithms to process human language to generate translations, analyze content, and provide semantic comparisons.
- **API – Application Programming Interface:** A collection of method definitions available for usage by modules of the program.
- **API Endpoints:** URLs where the API receives requests to handle.
- **Middleware:** A component that sits between different parts of a software system, controlling how data flows between them.
- **Front-end developer:** A developer working in the UI app of the Symmetry repository responsible for integrating API responses and designing user interactions
- **Backend developer:** A developer working on the Wikipedia APIs and LM APIs, responsible for handling data retrieval, processing, storage, and security.
- **End users:** People who interact with the UI application to request translations, compare content, and access Wikipedia data through the system.
- **CORS - Cross-Origin Resource Sharing:** Rules to ensure that only specific domains can access an API, preventing unauthorized web requests
- **API keys:** Unique credentials used to authenticate and control access to an API, ensuring that only authorized clients can send requests.
- **HTTP requests:** Communication method used in front-end application to communicate with backend APIs
  - **POST:** HTTP request that has a request JSON body for handling complex data that can't be sent in query parameters
  - **GET:** HTTP request for retrieving data using query parameters used for getting data from Wikipedia API
- **Body parameters:** Parameters included in HTTP request, typically in JSON format
- **Query parameters:** Parameters included in HTTP request, typically within the URL

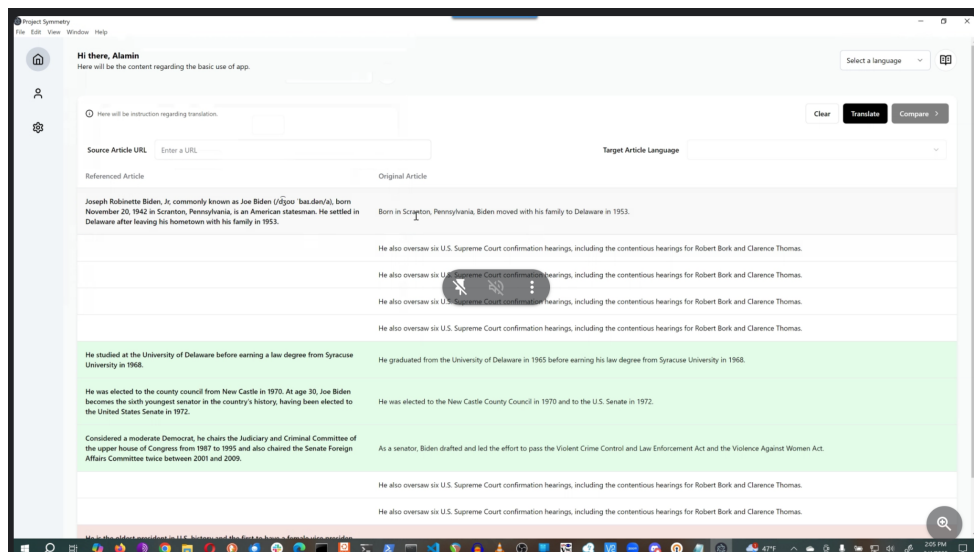
## Sprint 1 – Selected User Stories

1. User Story 1: As a front-end developer, I want to be able to retrieve articles from multiple Wikipedia languages via API, so that I can obtain data for translation comparisons. - Size: 3

2. User Story 2: As a front end developer, I want to request translations for the page I am displaying to the end users, so that they can view alternate versions of a page that they can understand. - Size: 3
3. User Story 3.1: As a backend developer, I want to configure middleware for API access, so that I can ensure secure access to data. - Size 8

**Sprint 1 total: 14**

Provide sketches for your design:



Hi there, User name

Here will be the content regarding the basic use of app.

English

1 Translation

2 AI Comparison

Here will be instruction regarding translation.

Clear

Translate

Compare >

Source Article

www.xyz.com

Target Article Language

www.xyz.com

Source article will be available here...

Translated article will be available here...

Word Count 100

Word Count 100