

Microservice Architecture

- I. Core architecture as a web application
 - A. Provides user interaction
 - B. Outputs the display on UI
 - C. Handles database I/O
 - D. Reuses service in all generators
 - E. All computations done in the backend
 - 1. Frontend makes API calls to the backend
 - F. User interface panel
 - 1. Allows users to customise parameters of art generator
 - 2. Provides clear instruction page for users
 - 3. Provides clear documentations for developers
- II. Database component
 - A. Handles storage and caching
 - B. Makes API calls to the data
 - C. Preprocesses the data
- III. Multiple backend implementations of art generator
 - A. Art generators will be loosely coupled
 - 1. Creates an output for web app to display
 - B. Implemented independently to add flexibility
- IV. Converter Service
 - A. Converts generative outputs to displayable format
 - B. Allows for multiple forms of generative outputs