Functionality API

Saber Modpack Manager

MtgSaber

# Synopsis

This component of the Saber Modpack Manager system is the REST API “gateway” to backend features. It will facilitate the various features listed in the component synopsis provided by the system Overview document. This API will run on JVM and will be moderately scalable via instance replication.

Until this system becomes publicly used and is moderately successful, this will simply be a monolithic Spring Boot application encapsulating both the outward interface and the actual back-end funcitonality. It will be containerized with Docker, but persistence will remain in one SQL database.

Perhaps in the future, the actual feature processes will be extracted into a microservices architecture with some supporting technologies and frameworks such as Akka and/or Kafka. However, the REST API “gateway” will remain as a containerized Spring Boot application and will scale via replication, which may interact with this supposed microservices ecosystem via whatever interfacing technologies are appropriate.

# Architecture & Technologies

## Spring

This application will be implemented with Spring frameworks and a hybrid of Scala 3.1 and Java 17. Request mapping will be handled by Spring MVC annotations. Most subcomponents that *can* be handled by Spring features *will* be handled by those features, such as configuration files. The application itself will be launched via Spring Boot, and the feature code will be implemented in Scala as much as is appropriate.

## Docker

## MySQL