

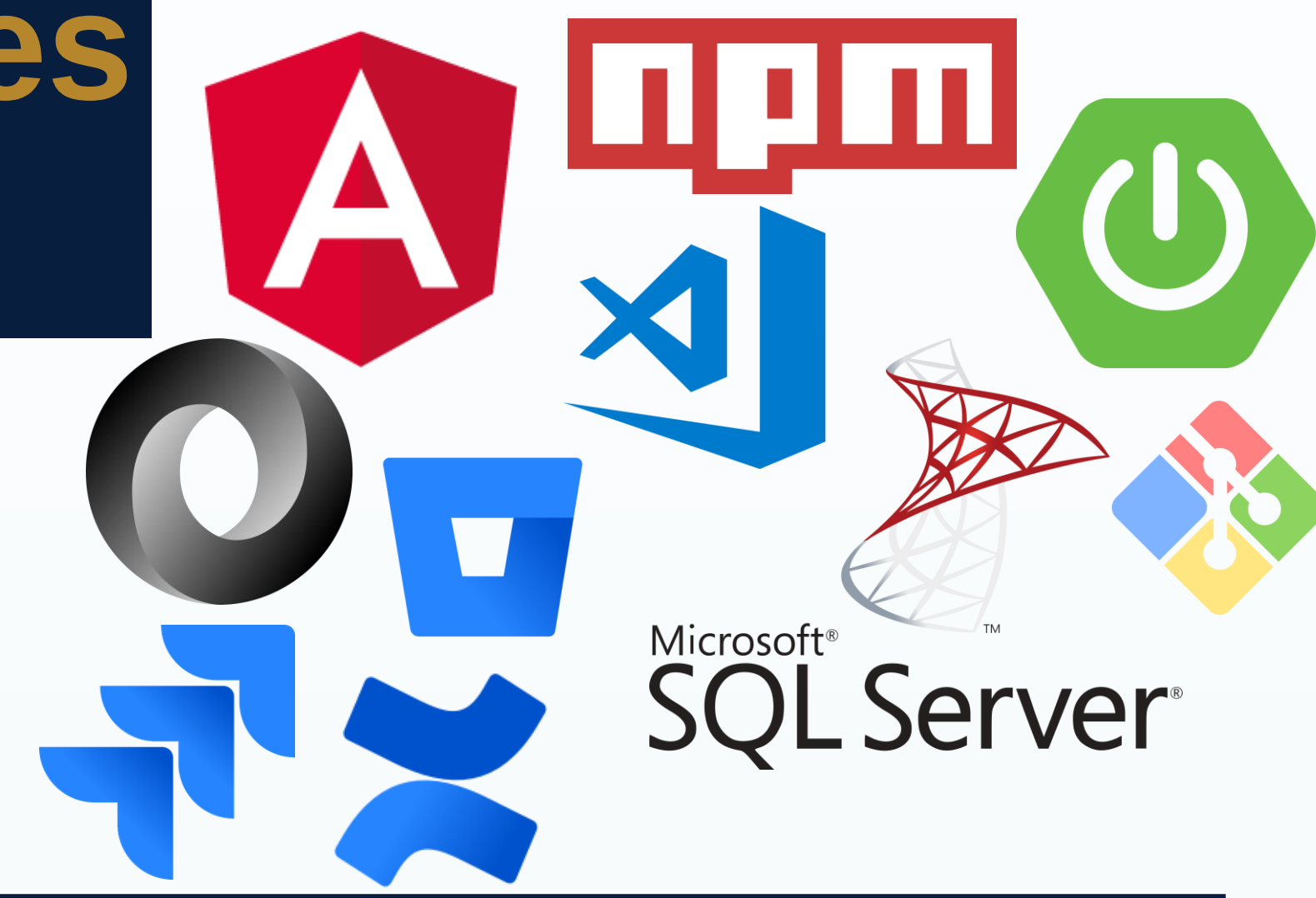


BOLO v12.0

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Problem

Police officers have a manual system to create and distribute information pertaining to a crime. The information can take from 24 to 48 hours to be spread throughout a single police department.

There is a need for an automated system to handle the creation and distribution of BOLO fliers throughout the police community. The system will improve the solution of crimes.

Current System

There is a system in place that has been developed by FIU engineers. Last semester, the decision was made to restructure the entire application. The system now meets all functional and non-functional requirements set by stakeholders. My contributions to this new version for BOLO are:

- User tiering and permissions
- User Management
- Agency Management
- Category Management
- Full-text BOLO search

Requirements

The system shall:

- Allow the user to be given certain permissions and abilities based on their tier.
- Allow an admin to manage (create, edit, delete, deactivate/reactivate) agencies, categories, and users.
- Allow the user to have a full-text search capability of the BOLOs.

Summary

The goal of the project is to build a BOLO Flyer Creator web application that will speed up the process of creating a BOLO (Be On the Lookout).

This 12.0 iteration of the product implemented the last few major functionalities of the BOLO application such as: User tiering and permissions, User Management, Agency Management, Category Management and Full-text BOLO search among others.

Implementation

Technologies Used:

The system was implemented by using three TIER - RESTful API architecture

- Frontend: Angular Material, Html5, Angular 6, Modules, Components, Services, Dependency Injection, Models, Views, Routing
- Backend: Java, Spring Boot, Model, Controllers, Repository, CRUD, Services, Uploads
- Database: SqlServer

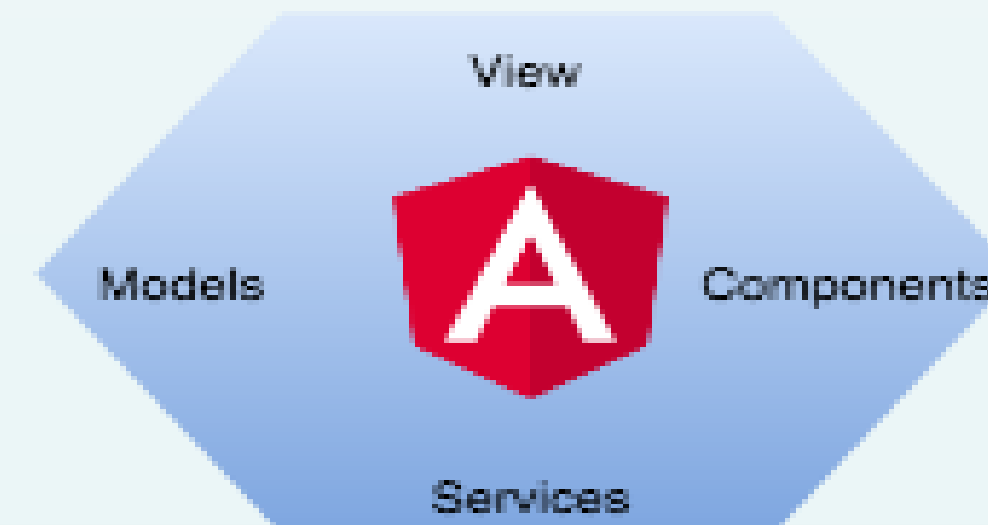
Verification

Manual unit, integration, and system testing were used to verify the application.

Verification was also done in the backend by Spring Boot. Any invalid requests or exceptions are caught and return an error response.

System and Object Design

Presentation Layer

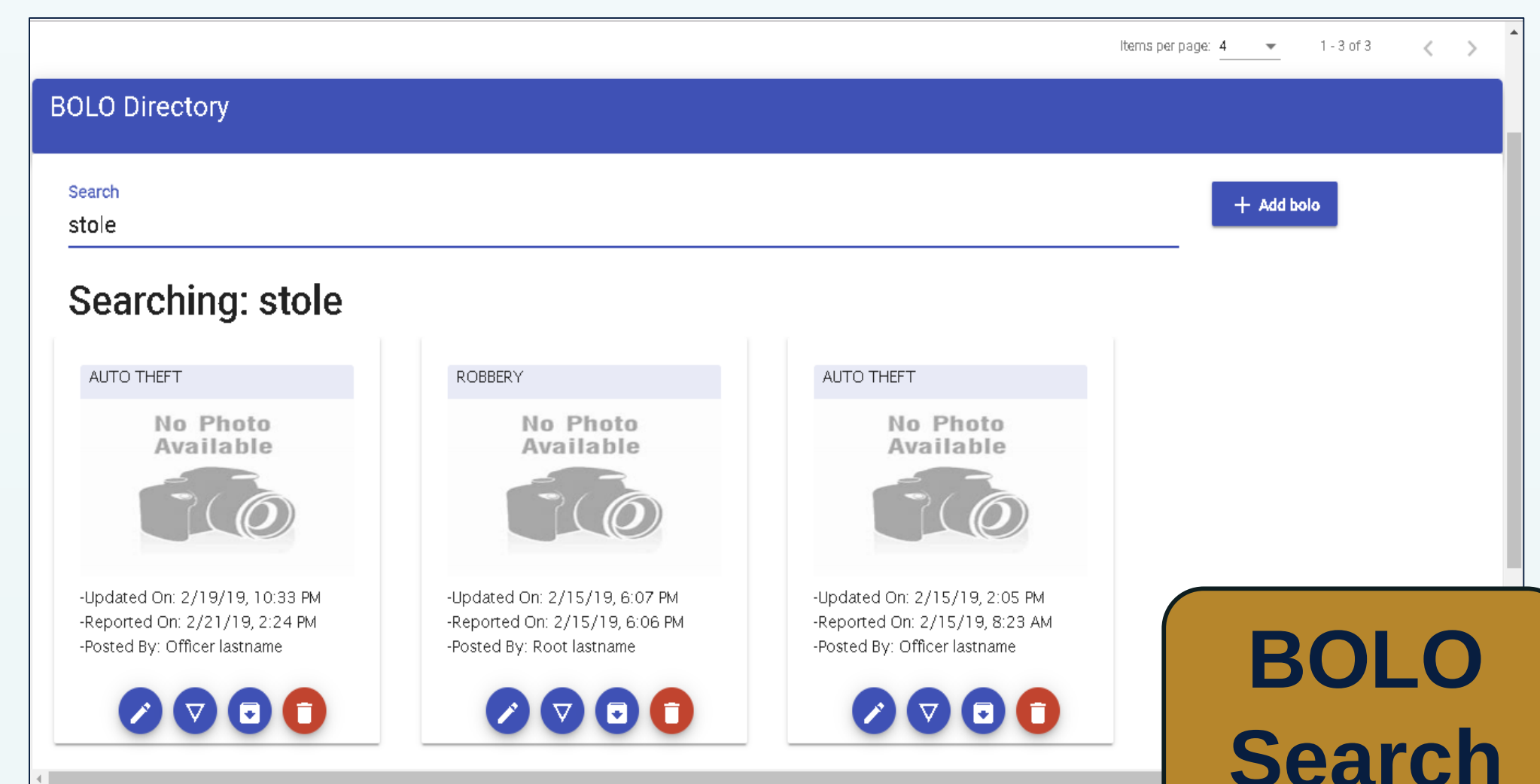
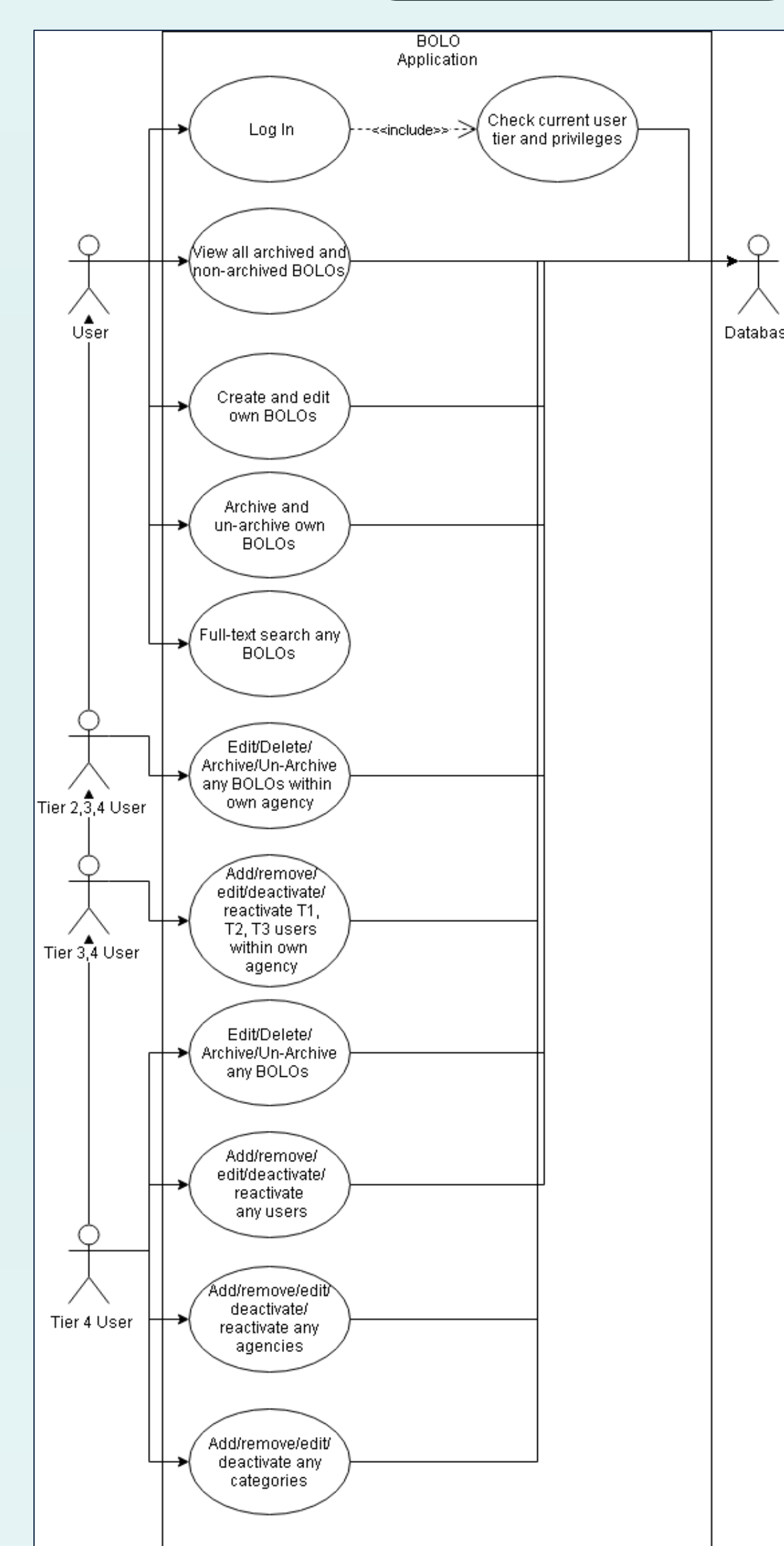
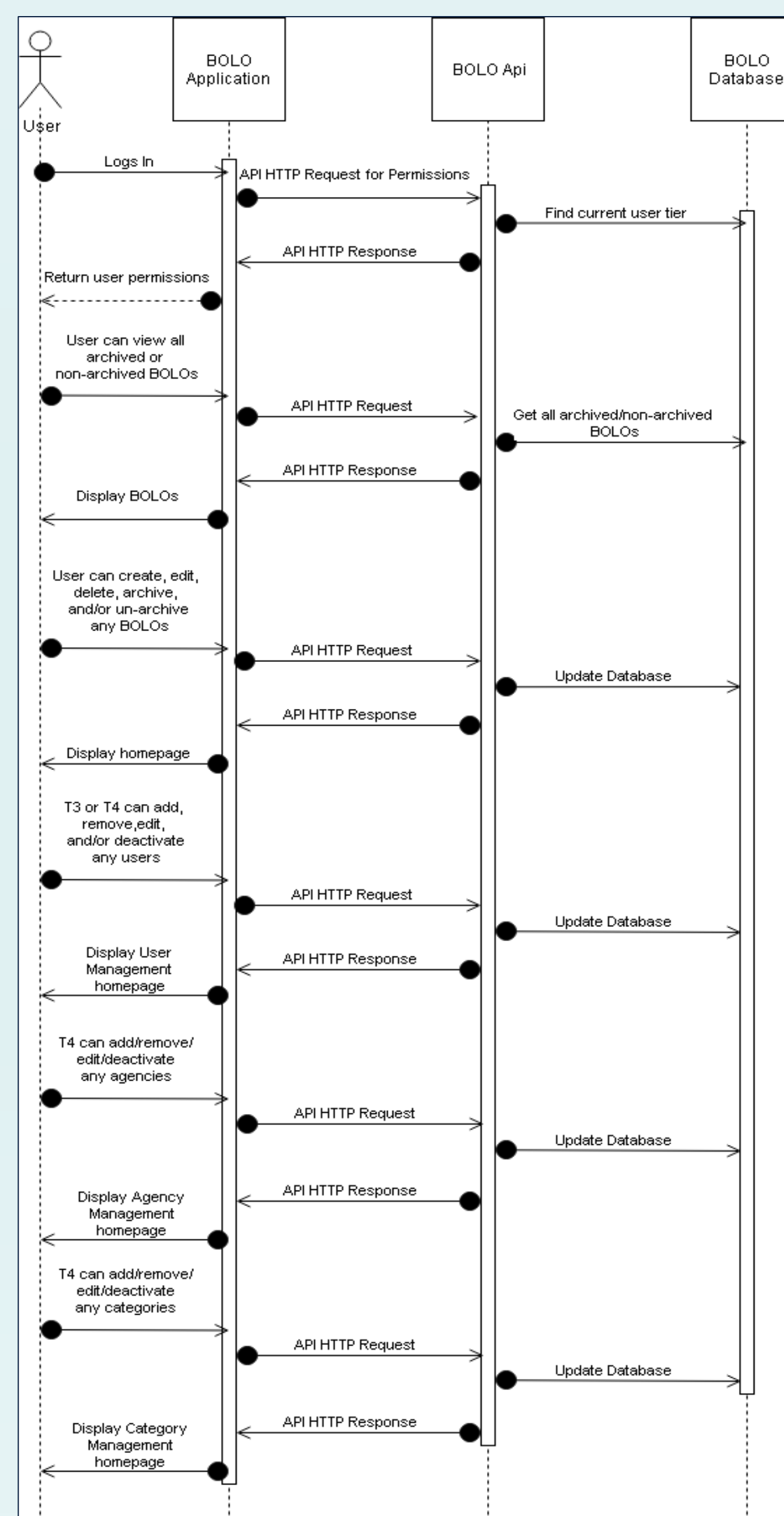
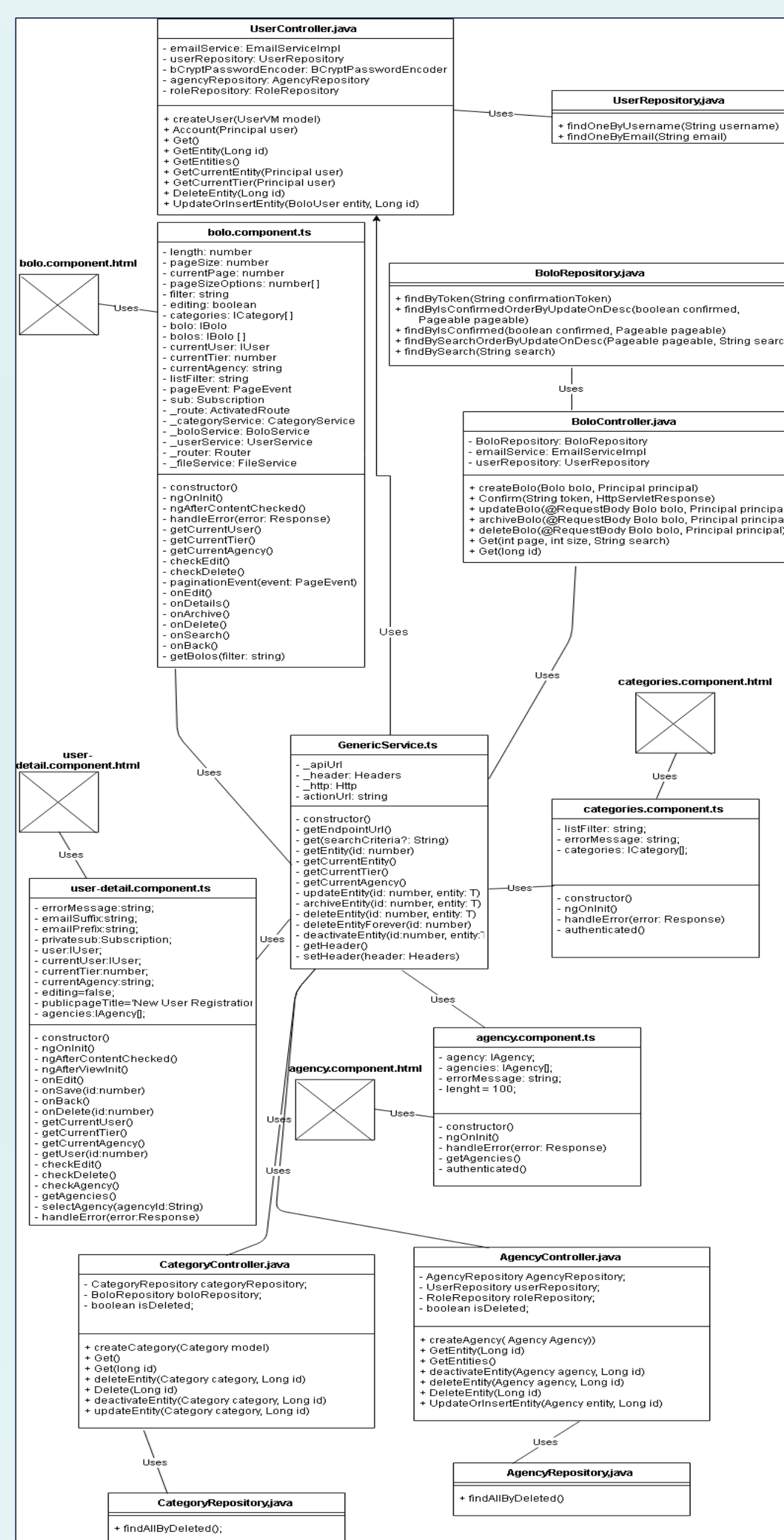
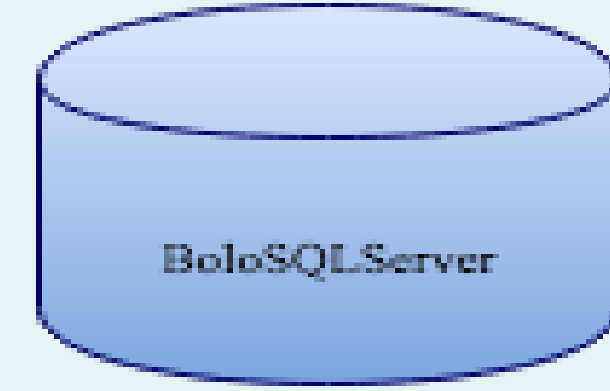


Application Layer

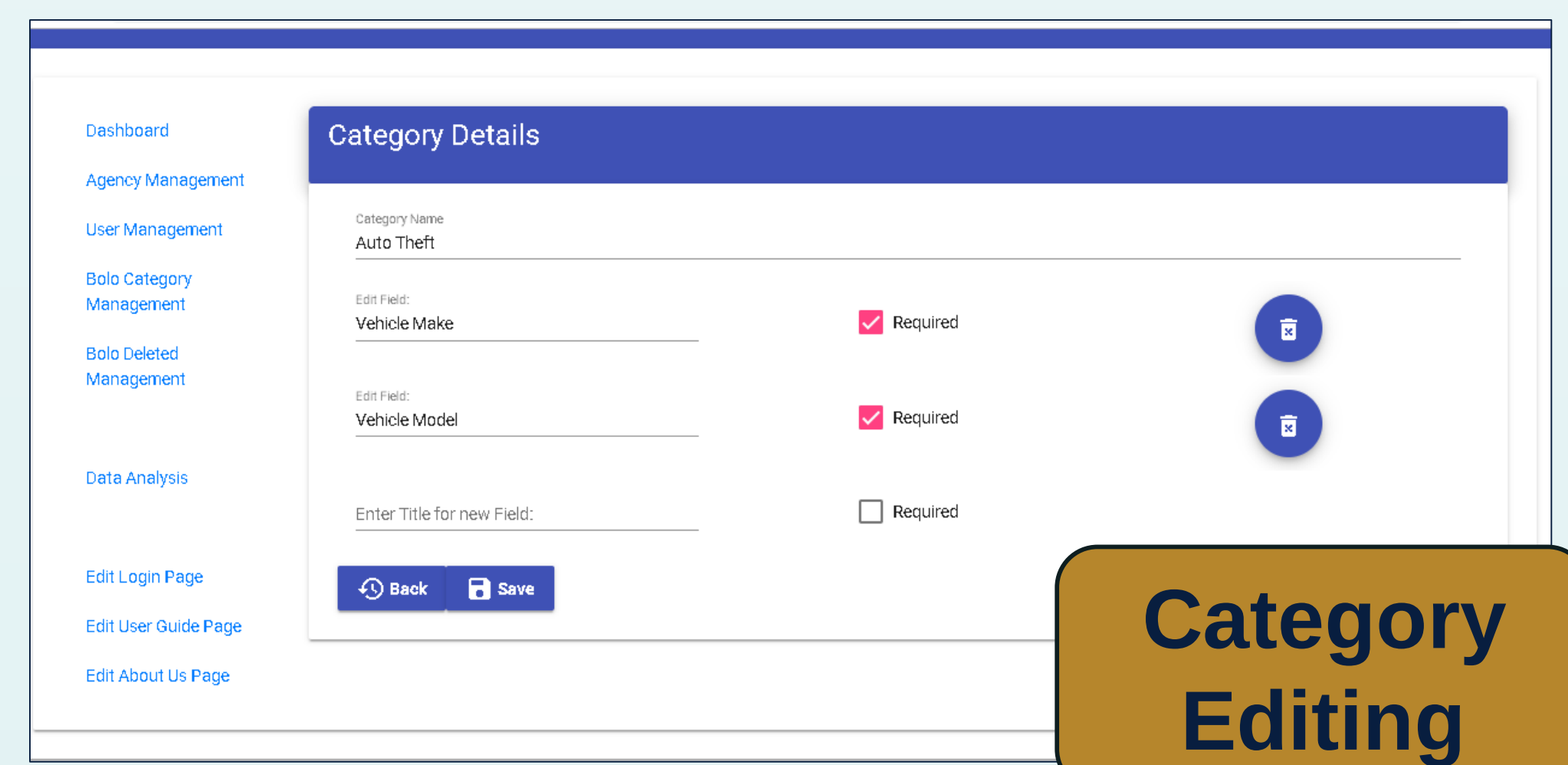
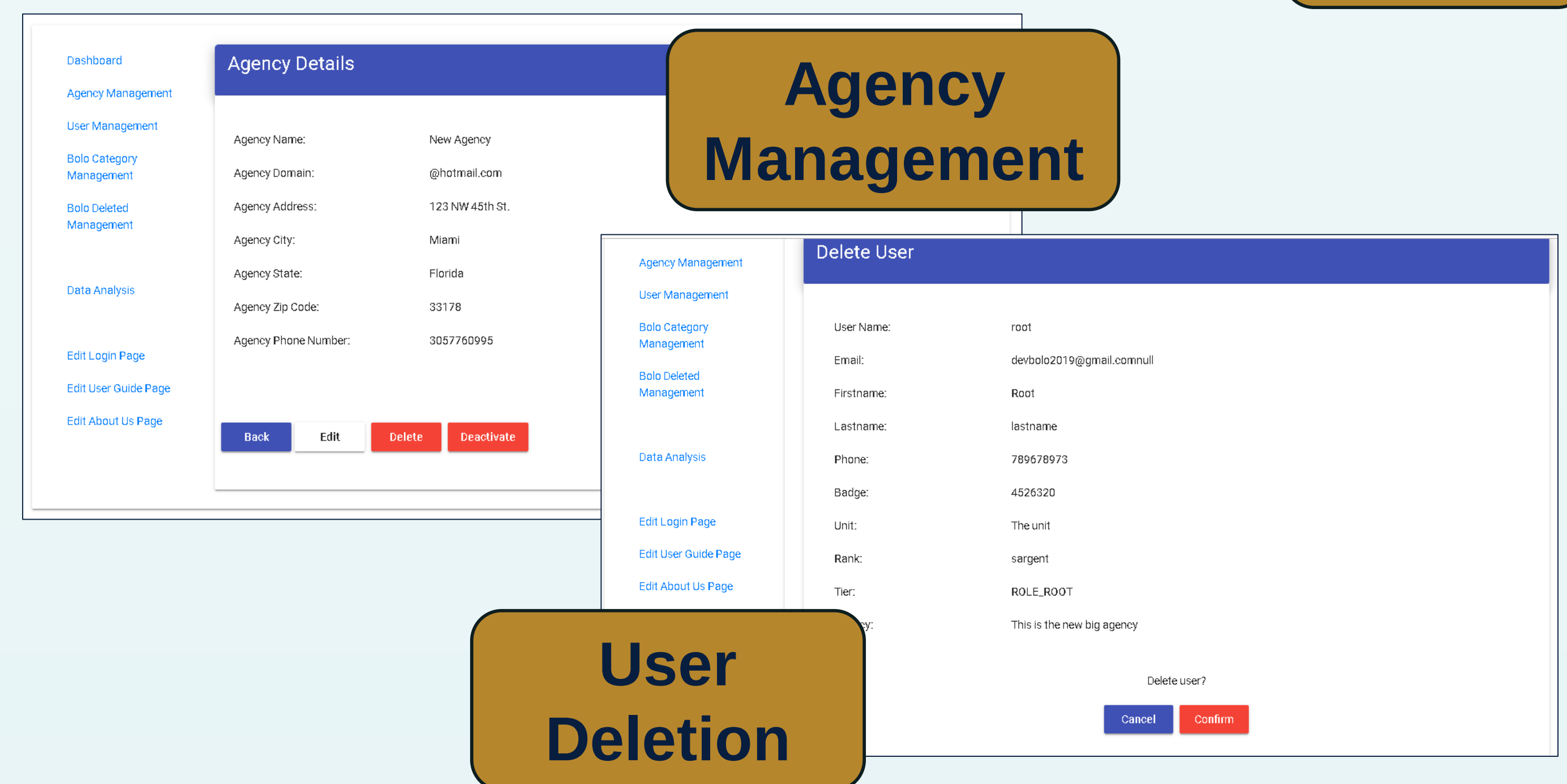


Repository

Data Layer



BOLO Search



Acknowledgement

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