



Problem

Currently the BOLOs are been processed manually by the officers, so there is no way to do simple functionalities like search or filter through them. Also, there is no easy way for sharing the information, even within a single police department. So, the Police Departments are in the necessity for automating and digitalizing the whole process, for a better way of BOLOs creation, distribution and the manipulation process in general.

Current system

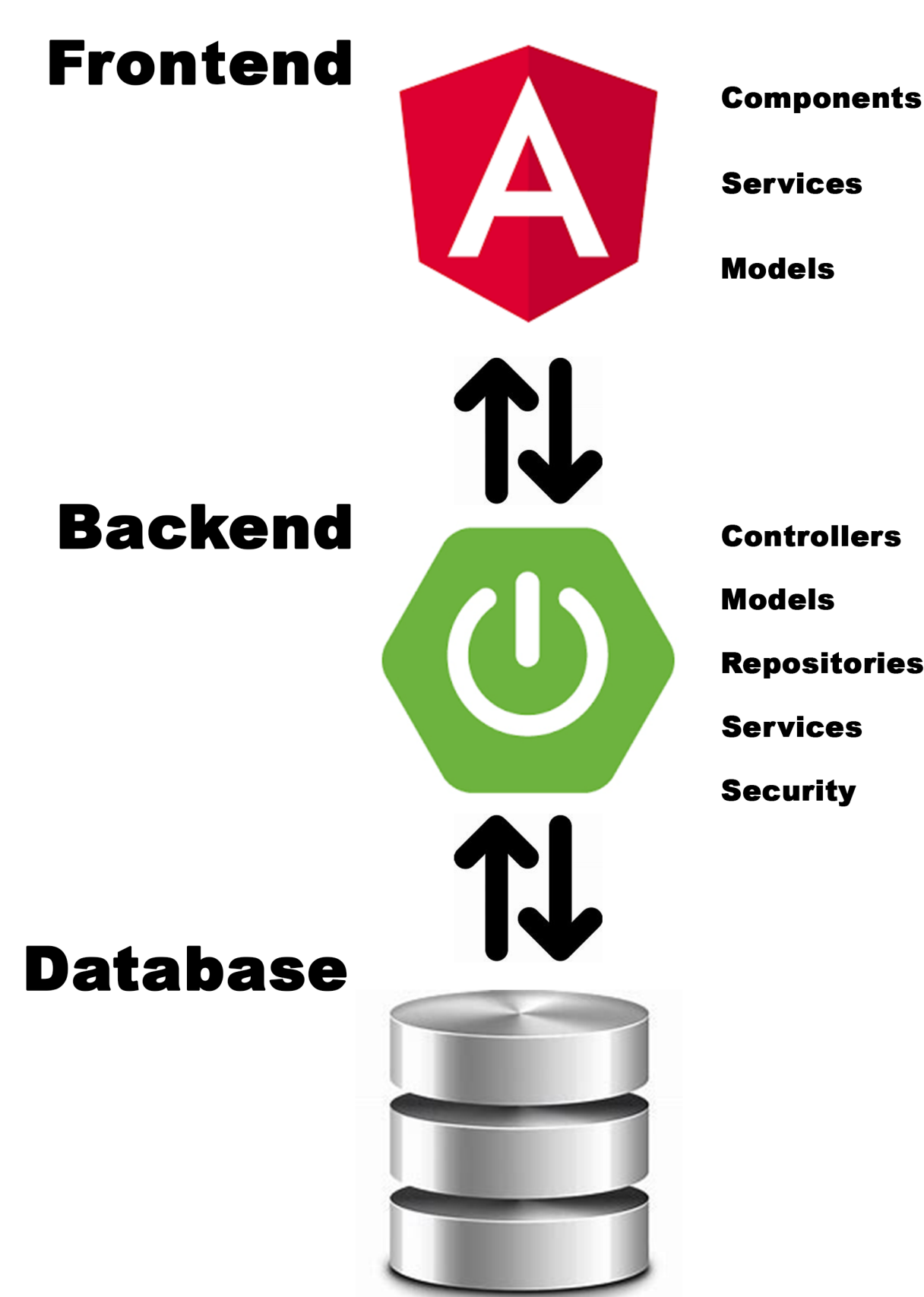
The software has been developed by several teams, and it has been evolved and redesigned through different platforms and technologies. Finally, the last semester it was decided that it will be developed in the combination of Angular 6, SpringBoot and SQL Server for the database management. I contributed to the actual product by implementing and/or fixing some functionalities like:

- Archive/unArchive, Delete/Recover of BOLOs
- Subscribing by Agency and Category
- Admin dashboard incomplete functionalities, among other things.

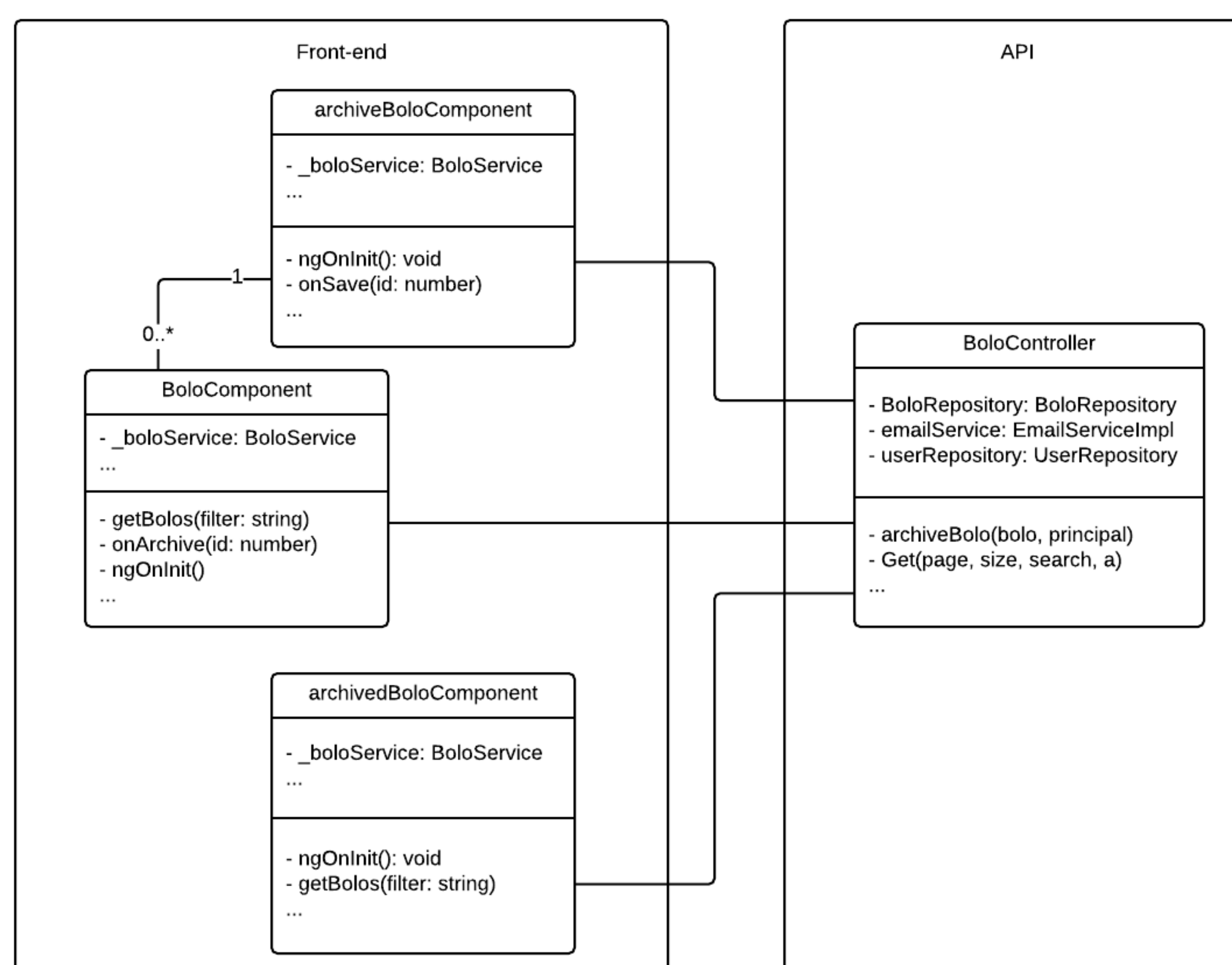
Requirements

- The system have to be capable of:
- Create, edit and delete objects like:
 - Agencies, Users and Categories
 - Create, edit, archive and delete BOLOs
 - Allow for the PDF generation of BOLOs
 - Send notifications via email of BOLOs manipulation (add, edit, archive, delete)
 - Searching and filtering on most of the screens, etc.

System design



Object design



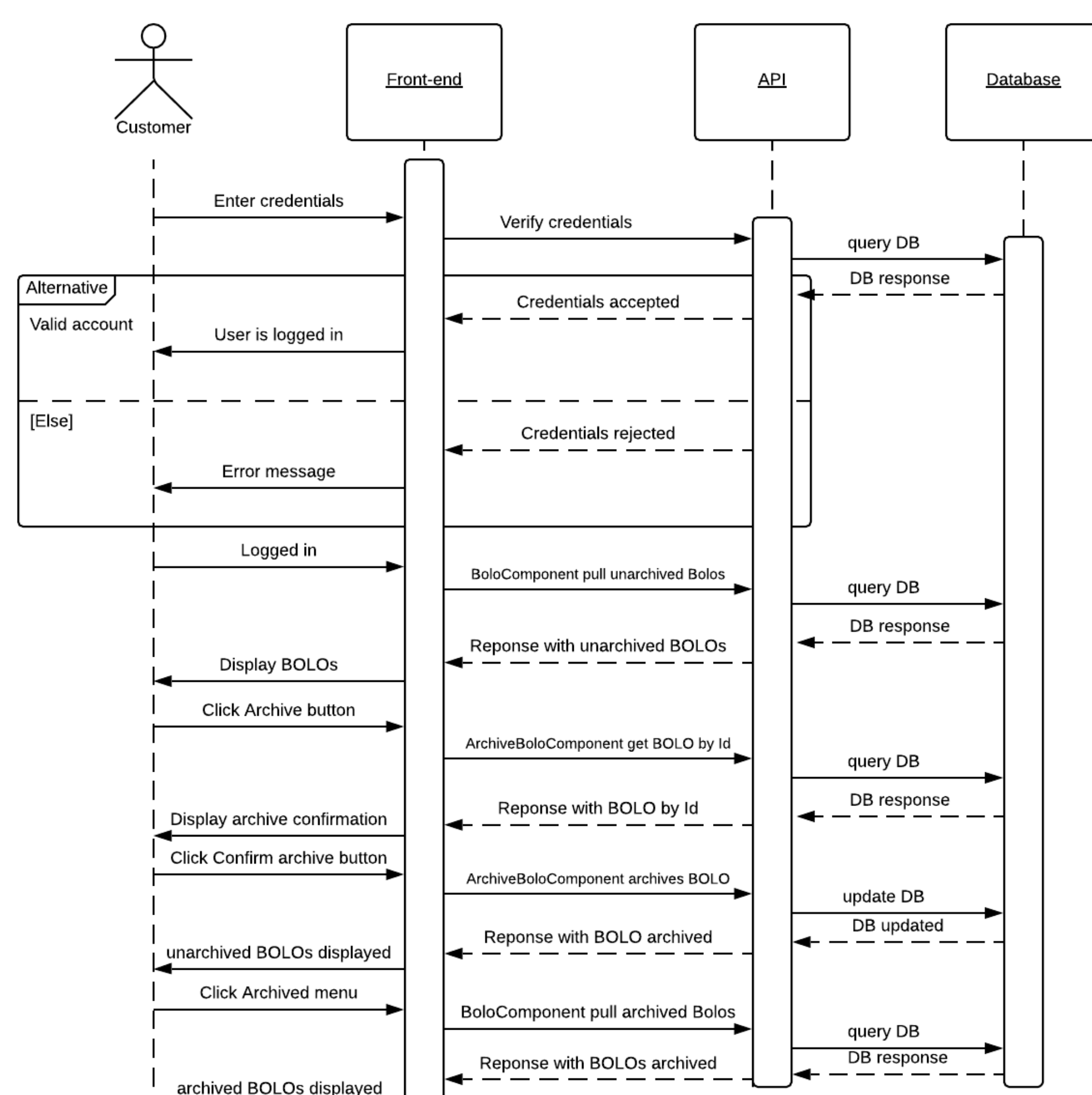
Implementation

- Frontend: Angular (JavaScript framework)
 - Client UI/UX
 - Technology used:
 - Angular 6
 - HTML5
 - Bootstrap
 - Angular Material+Icons, etc.
- Backend: SpringBoot (Java framework)
 - RESTful API as application layer between frontend and database
- Database
 - SQL for storing data

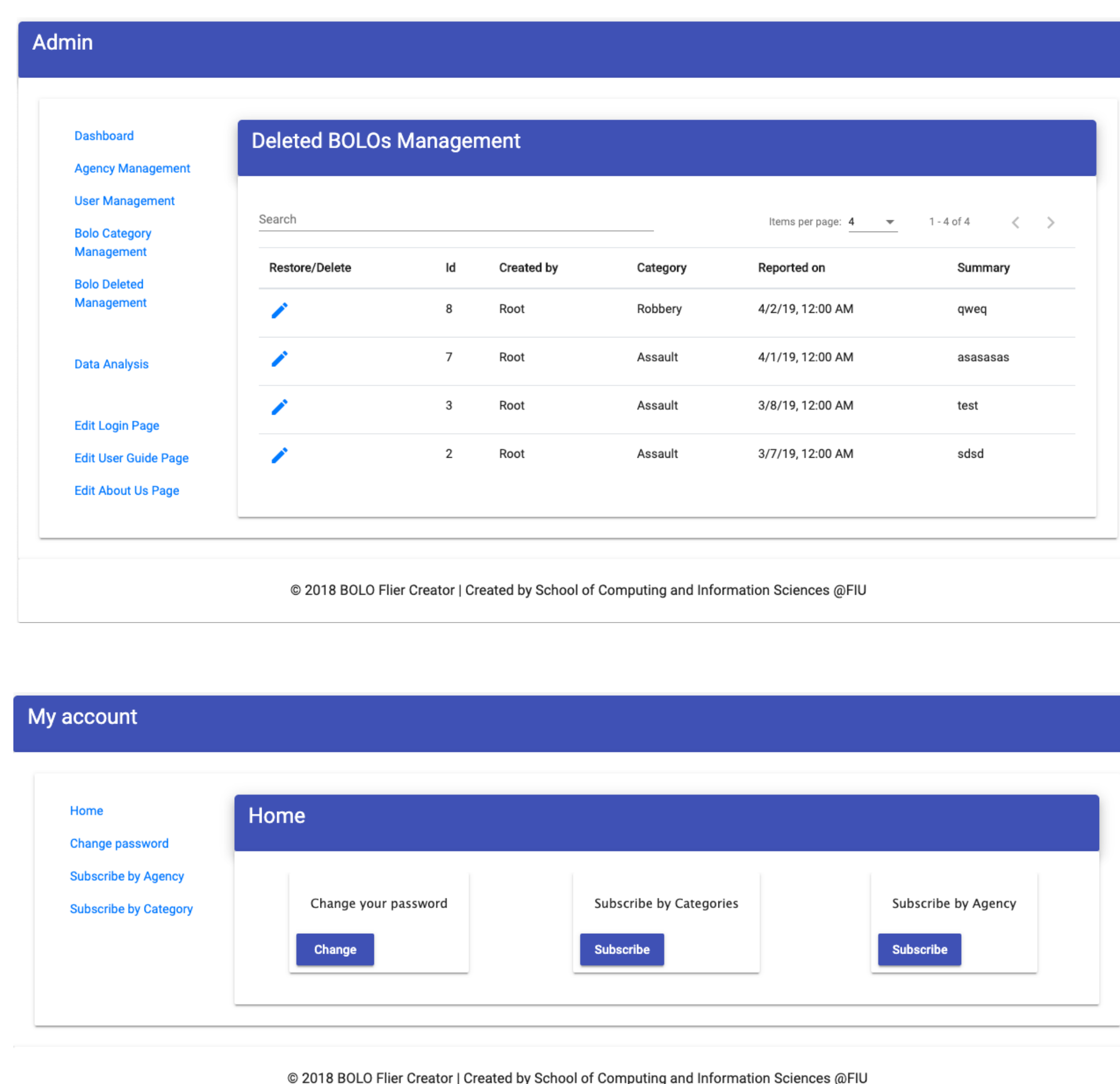
Verification

We tested the product manually all the way we were implementing new and fixing existing functionalities. Also, we relied on Angular and SpringBoot for validating all the requests, and any invalid request is handled with the proper messages or response. Several sequences of Sunny and Rainy Day Cases scenarios were used for the System testing.

Object design



Screenshots



Summary

The BOLO v.12.0 was redesigned to a new platform and technologies on last semester. We inherited the application with more than 50% completion. And then, we added new functionalities and we have fixed existing features that weren't working. Among the features I worked are: BOLO deletion/recovering, archiving/unarchiving, subscriptions by Agency and Category, email confirmation for new functionalities, etc.

Acknowledgement

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