2017 - Summer Semester

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Building a Web Application that allows the navigation and search of mail archives

Mailing lists and mail archives are stored using the mbox format (and its variations). See:

- · qmail mbox description
- The application/mbox Media Type

The main objective is to implement a server-side component with the node.js platform, which allows the development of server-side JavaScript applications. A recommended framework to develop web applications is express. The back-end functionality (server-side) will be implemented via RESTful services. The student should research frameworks to implement search capabilities for a mbox file. Additional support libraries are mailbox parsers such as MailParser and/or node-mbox.

Additionally, you should create a Web application (HTML5-based GUI) that allows the navigation and search of mail archives. To do that, the following steps are necessary:

- 1. Analyse in detail the use cases and the functionality of the application. Document and present graphically the results.
- 2. Implement a set of RESTful Web Services for these use cases. Document the functionality of these services.
- 3. Analyse in detail the use cases and workflow of the GUI. Document and present graphically the results.
- 4. Implement and test all the components.

Evaluation criteria

- Quality of the use cases analysis and modeling.
- Number of services implemented.
- Functionality of the application.
- Creativity of the GUI design.
- Coverage of the unit tests.