Corpus Web
1st milestone

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Accomplished tasks

1. Register Account
2. Log In Account
3. Log Out Account
4. Experiment CRUD
5. Fill Usability Questionnaire
6. Database up in the cloud
7. Remote Access to the platform

Challenges

1. Setting up the development environment in our machines.
2. Migrating the project to a new frontend to solve an issue because of which we were unable to run Angular tests.
3. Writing our first tests both for the back and frontend.
4. Configuring the continuous integration service with Travis CI.
5. Identifying a commit that broke a component and root cause analyzing to find out why that happened.

Identified errors (Interview with Dr. Alberto Oliart)

- Again, missing feedback for incorrect login.
- A successful signup should not redirect immediately to the login, but to the dashboard (or at least give feedback).
- More information about how to operate the application
    - Hints, suggestions
    - Also option to turn off the suggestions

Identified errors (Interview with Dr. Eréndira Flores)

- Wrong name of the HTML pages ("Frontend").
- Users should be able to access ExperimentRetrieve by clicking the experiment's name.
- Repeated 'Back' button in the ExperimentRetrieve component.
- In the ExperimentCreate component, the default start date should be set to the current date.
- 'Leg' is missing in the body parts.
- The ExperimentDelete component does not take you back to the home view.
- Missing feedback for users in several scenarios:
    - User sign-up
    - Failed operations (login, experiment creation, etc.)
    - Successful operations (sign up, experiment creation, etc.)

Identified errors (Interview with Dr. Daniel Pérez)

- Lack in error recovery capability when creating new experiment.
- There should be an option for "select all" when selecting body parts in creating new experiment.
- No "back" button in "Questionnaires" section.
- Need feedback when filling requirements when creating new experiment, to know that something is not complete.
- Slow answers from the server when submitting an action.
- When browsing the calendar to select a date of beginning for the experiment, the website crashed.

Ideas for fixing errors (not an obvious fix)

- Using Intro.js or similar tool to design a more user-friendly experience
- Read and apply the user interface standards established on the ISO/IEC Standard to avoid lack of usability and intuitivity in our application.
- Implement unit testing for error detection on the application to avoid leaving a user without feedback.
- Implement AngularJS Material which is a UI Component framework that allows programmers to automate error handling due to errors caused by the user, following UI standards.

Lessons learned

1. Learning curves should be taken into account in software development time estimates.
2. Continuous integration only makes sense when all the necessary and sufficient tests have been included and they actually test components correctly.
3. Thorough code reviews and approvals from colleagues are vital in the process of collaborative software development.
4. Automation and the right tools can save a lot of valuable time during development.

Future work

- Prioritize and tackle remaining user stories
- Ability to add, edit, delete experiment questions
- Showing of images and audio for each experiment
- Figure out recording of user response and hosting video
- Adding statistics for each experiment and questionnaire

Demo

[YouTube video](#)