**Algoritmos Y Programación II**
**Final Project: Enjoy Quarantine!-Second part**
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With the recent pandemic caused by COVID-19, many people have been forced to isolate in their houses, giving their daily routines a radical turn. Being used to totally different rhythms of life, lots of people have faced difficulties to reorganize their activities so they can work or study from their homes. Because of this, it has been decided to develop a project which consists in an application that will help people control their habits. Even though the application, which will be known as “EnjoyQuarantine!” will be of free access, it will also possess premium functionalities. Some of the public access functionalities will be: enter and save different activities, get recommendations to take care of your health, put reminders, see the general information of other users, listen music while using the application and read the motivational quote of the day.

## JUSTIFICATION

The project is designed to be a temporal application. This is because its main objective is to make people’s lives easier during the quarantine imposed due to the COVID-19, so it will be disposable when the quarantine’s over. Therefore, it’s not necessary for the project to reach great depth, making it achievable by a single person.

## FUNCTIONAL REQUIREMENTS

**FR1. Create** activities based on the data entered by the user.

**FR2. Save** the activities entered by the user.

**FR3. Add** a new account. For this, the program requires user data, such as his name, username, password, birthdate, gender, height and weight to be entered. This will be done using a recursive method.

**FR4. Show** the motivational quote of the day.

**FR5. Show** recommendations with which the user’s health can be improved/maintained.

**FR6. Search** an account based on the username of the user to be found. This will be done using binary search method.

**FR7. Play** music while the user is using the application.

**FR8. Add** a reminder.

**FR9. Show** the reminders that the user added or indicate that there’s none.

**FR10. Show** the general data of all users.

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**FR11. Add** a motivational quote. The parameter is the text of the quote.

**FR12. Search** an account based on the name of the user to be found. This will be done using binary search.

**FR13. Sort** accounts using selection sort. The criteria of sorting will be the username of the user.

**FR14. Sort** accounts using bubble sort. The criteria of sorting will be the name of the user.

**FR15. Sort** accounts using insertion sort. The criteria of sorting will be the height of the user.

**FR16. Sort** accounts using selection sort. The criteria of sorting will be the weight of the user.

**FR17. Sort** accounts using bubble sort. The criteria of sorting will be the height of the user.

**FR18. Sort** accounts using insertion sort. The criteria of sorting will be the username of the user.

**FR19.**

**NON-FUNCTIONAL REQUIREMENTS**

**NFR1.** Serialize users information.

**NFR2.** Read the text file containing sanitary recommendations.

**NFR3.** Read the text file containing motivational quotes.

**NFR4.** Deserialize users information.

**Implemented requeriments**

- Add an account: it is implemented in class EnjoyQuarantine.
- Add a motivational quote: it is implemented in class EnjoyQuarantine and MotivationalQuote.