**Criterion E: Evaluation**

**Success Criteria met:**

1. The user should be able to sign-in, log-in, and sign-out using a real-time database to store information.

**MET:** The login/registration page in my app contains a button each for registering a new user, logging in and logging out. Input errors such as incorrect/missing data is handled upon receiving input. When logging in the input is successfully matched against data in the firebase.

1. Have a user-friendly User Interface that is easily navigable and fits the client’s description. As my client said, the main users of the product are students.

**MET:** I tried my best to make application look appealing to students, going as far as drawing the logo of the app by hand. I colored my app a bright orange as my client wanted the app to be based off “Dia de los Muertos” or “the day of the dead”. I designed my app such that that every input required was specifically pointed out, such as “Add lesson”, “Update data”, etc.

1. The user can edit flashcards and add new ones using an admin page.

**MET:** I gave the power of adding and deleting flashcards to the admin, however as my client said it would be easier to allow each user to change their own cards according to their needs, I made a separate admin page but gave access to all the users.

1. The user can input their information which be returned to them in the form of flashcards and a randomized memory game.

**MET:** The user can automatically receive data in the form of flashcards and a game as soon as they enter it.

1. The user will be able to assess their own skill level, competing against themselves and improving.

**MET:** The user can see which question they got right however, I did not add a score system, given more time, I can add such features.

1. The user can add any subject and their flashcards into the game, based on their own strengths and weaknesses.

**MET:** The user can add flashcards of any subject into the app, I did not put a restraint on what information is valid to be entered into the cards.

1. The user has access to the database and can make necessary changes.

**MET:** The user can access my database in Firebase quite easily and make changes to the application there, this will change the data stored in the app and vice versa.

**Overall Evaluation**: (refer to Appendix for documented conversation with the client.) I was not able to add features such keeping track of the score, competing against other players, I thought these would put more pressure on the student and would not be very relaxing. I met my success criteria for the app, and I can also add additional features in the future if required. My client was happy with the product. I also did a final demo with my advisor who has been with me and seen the app’s progress from the beginning. She was satisfied with my progress and believes that I did successfully meet the set success criteria. She did agree with the client’s feedback and suggested a short-term solution of printing out the users’ score, however time did not permit this.

**Further Development:** Overall, going into this project with little experience with Firebase and no background in web development, I learned a great deal about dart development and especially data fetching from a real-time database. I am now much more familiar with being able to interact with a real-time database and am confident that I will be able to apply with these newly learned skills with more ease and less redundancy in the future. As for this application, I will continue to work with my client to expand upon it and here are a few potential next steps:

1. Based on the feedback from my client and suggestion from my advisor a next step would be to add the users score and a transcript of previous scores.
2. The client also asked me to put a picture of a flower into the app and overall improve the design of the app, I want to make my app look even more appealing to kids.