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| **Software Implementation Project Title: EntreCoore**  **Project Group Members:**   |  |  |  |  | | --- | --- | --- | --- | |  | **Student ID** | **Name** | **Overall Contribution(%)** | | **1.** | **1731920** | **Aylin Görgün** |  | | **2.** |  | **Bahri Kaan Beşik** |  | | **3.** |  | **Fatma Betül Erkoç** |  | | **4.** |  | **Hakan Erenler** |  | |
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**Project Management:** (Explain the tasks involved in the project, their durations, and how much each member contributed. Gantt Chart output the work package should be included in the project and the work package activities included in each work package should include the planning of time and responsibilities.)

**Abstract: (**This section is the short summary of your project.The idea of the project, how to project will be implemented in real- life, and the methods used for modeling, simulation, testing, prototype production etc. explain the validation methods and the expected / expected results. Approx. 400 words)

**Methods Used in the Project and Implemented Product: (**In order to realize the project idea, the solution, the path, the tools, techniques and methods used should be explained. This section is also expected to include activities to verify or validate project outputs. Provide screenshots of the final product and explain the details about the flowcharts. Approx. 800-1000 words)

MOBILE

In mobile development part we used Flutter. As we mentioned earlier Flutter is a great IDE for cross platform applications. It is basic, beautiful most importantly it is fast. We preferred Flutter instead of React Native because it is much faster and has a great community too. We are welcoming you with our login page. It is powered by Firebase. Firebase\_auth is the library’s name and we installed from the Flutter’s library called Dartlang. If you don’t have an account you can created one too. Firebase has a method called \_createUserWithEmailAndPassword and makes everything easier.

We used state-based structure for managing our authentication stage. Everything is connected to the root page directed from here. We also implemented validation methods. You have to enter something in both password and email fields. If you don’t we show you an error. Also these somethings must fit Google’s email and password standards such as your password must be at least six chars. You can simply check all of these with writing a validator method and use as a filter before saving the user such as onSaved => (val) your text.

After successful login you will see to tabs. One for reading the news one for your todo lists. Let’s start with the news page. We created this page because as an entrepreneur you have to keep up with the news and plan your day accordingly. We fetch the news from NewsApi. NewsApi gives you a specified api key and with this key you can access to the [“articles"]. Articles has few attributes we used author, published-at, title and the description. All of these returns to a json of course. And related library in Flutter is url\_provider. All of these news is displayed in List and Cards as an list items. And we are using list builder to keeping data index. Keeping data index is very important because after you click a news card you’ll be directed to another page which will show you the details about the news. And be able to understand which news you are accessing we had to keep the index. In details page we are also fetching image-url attribute and converting json to an actual image using Flutter’s Image.network widget. Our second tab in tabbar is todo. Also comparing with the native android tabs are not fragments. In Flutter you can implement anything in anywhere this gives you a lot of flexibility. In todo tab there is an empty list view and you can add listtiles. Those tiles are your todo list items. We are keeping them using sqlite (Sqlfite in Flutter’s library). In backend we have predefined list tiles called model which has a title and creation date. Basically, if user wants to add a list tile he/she just filling those fields. About creation date field, actually it is not up to the user’s choice it is filled automatically according to phone’s date. Of course we are converting it using Flutter’s date.format widget. Later on we are thinking to implement a timer for your cards so you will be able to set a deadline for your card. List tiles includes all of the CRUD circle. Create read update and delete. Most beautiful part is you can double click a card and add checkboxes. So, you can also enter details to your cards.

Above our tab bar there is a floating action bar for your notes. It is also a crucial feature for an entrepreneur. Working principle is same with the todo list, it uses a CRUD cycle. We choose sqlite because Firebase’s Firestore will be cost so much. But later on we are planning to create a backend our own for connecting with our web platform. In notepad section date formatter showing just the day. It works like this if you want to convert the whole thing you should use date.format(EEE for days, MMM for months and YY for year). Each letter stands for shown letter for example if you format as EEE you will see Mon for Monday.

You can also see your notes as list. Our update function implemented differently too. In todo page you should have long press to update, here we have a icon to delete. This offers you simplicity as all notepads should be.

In Flutter, AppBar has an attribute called drawer. It is the same thing with the Navigation Drawer in native-android. Drawer has userAccountsDrawerHeader attribute. We fetched network-image as background image. AccountsDrawer also have childrens: accountName, accountEmail and accountImage. As we mentioned earlier we are keeping our users in Firebase so our users is a collection. Method currentUser returns a Future<String> if you convert to string using to. String you can show accountEmail in the drawer as we did. This whole process is a preparation for user settings page. In this page you’ll be able to chance your picture and username. Why you should have those? Because also soon you’ll be able to add friends for working on the same cards. In our drawer you can also logout.

There is something worth to mention. In our drawer there is a list tile called Fun Zone. This tile navigates you to a mine sweeper game. Before we started this project, we targeted an app which contains all the essentials for entrepreneurs and having fun is one it. So, mine sweeper is basically two-dimensional array which has randomly positioned mines in it. Every element, let’s say boxes has a non-transparent cover. So, you don’t know where is the mines. As long you don’t click on a mine-box cover will pop and show you a number. This number will help you to determine where the mine is. In code-wise first we are randomly putting the mines and with the help of the loops we determine the numbers. Distance between mine and the box is the number we are showing to you. Also of course you can flag the boxes. Flagging makes the box unclickable. Determining user’s win or lose, again we are using states. There is also a timer to show you how much time did you spend as seconds.

DESIGN AND SOCIAL MEDIA

When we are purposing (designing) the logo, we prefered using the applications of photoshop and adobe illustrator since these applications that allowed us to do whatever we imagined. If our creditor choosed another application to create this logo, it would be Corel draw.When we were creating and designing the logo, we focused on some features like catchy color and being simple. The color was designed as dark blue and light red by our creditor. We choosed red since it draw attention and indicates how powerful it is. Also the Word “Kanban” firstly used by Toyota and since Toyota is Japaniese brand we can say Kanban invented in Japan. So we influenced from the Japnese flag. At the same time, text font had to be seen inovative due to our IDE Flutter and framework Vue.js cause they brought innovation.

We issued the power of social media That is prepared also as innonative as it can be. We choosed all the materials that are necessary according to materail design and cuportino standars and applied them in our designs. Also, we prepared video to show users how it should be used. Finalcut was used as a program for the video. Final cut includes a very powerful library and up to date interface.

**Literature Review**: (Provide proper citations to the references in your literature review based on IEEE citation style. Explain everything in your own word. Please keep in mind that these types of reviews take almost 2-3 pages with at least 10-15 references. Approx. 400 words)

**References**: Resources used in this section should be given.

**Code of the project**: