Submission Description

Storymate
Amin Aghazadeh Mahrousiyan (aghazade@uni-bremen.de),
Timo Schuchmann (timo5@uni-bremen.de),
Lars Hurrelbrink (lhurrelb@uni-bremen.de),

Note on using the App

Please always go to the Profile Screen and log out of the app when you want to leave it. Do not just quit the App. Thank you!

Division of Work

Lars Hurrelbrink

Based on the wireframe by Timo as a starting point I created the Figma Design of the different pages and iterated a bit on the general structure and UX flow of the app. I also designed the Logo and was responsible for most visual assets such as the images, animations and graphics for the application. The pencil style drawings that we use in the app are based on AI Image generation. Furthermore I was mainly responsible for implementing the Figma Design into the actual Flutter Code. Some of the App Pages I created in Flutter from the ground up, others, I took over from Timo and Amin and adjusted them to fit our Design Language. I also added animations where needed to the app and handled the majority of designing our presentation and app mockups.

I was responsible for shaping the user interface and user experience of the application, building upon Timo's wireframe as the initial blueprint. Within Figma, I crafted the design of diverse pages, iterated on the app's structure, and refined its overall flow. I also took on the responsibility of designing the logo and crafting visual assets like images, animations, and graphics. For the pencil-style drawings in the application I also leveraged AI image generation that I then further iterated on.

Beyond the design phase, I took charge of implementing the Figma Design into the Flutter codebase. This involved both the creation of new app pages and the adjustment of existing ones from Timo and Amin to align with our established design language. Animations were integrated where deemed beneficial, to make the app more engaging. Overall that means in the beginning I was focusing on the front-end of our app. However during the later development part I also needed to help with a large part of implementing the chat with firebase as my team members were struggling with that.
Lastly, in addition to my development responsibilities, I took on the task of designing the final presentation and app mockups.

Timo Schuchmann

At the beginning I created the wireframe for our app. This was then used by Lars to develop the design of our app.
During the implementation I mostly worked on the database part of our app. We decided to use Firebase because of the great usability. Inside Firebase we store all information related to the user in one database. In a second database we store the profile pictures of each user. And in a third one all data related to the chats is being stored. For the login we are using the integrated authentication functionality of Firebase. Next to that I worked on the connection process of two users. This means that two users are connected after the story selection and that they can chat inside one chat room. I also worked on the profile pages and ensured that the user data is correctly loaded.

Amin Aghazadeh Mahrousiyan

During the project, I worked on the structure of the connection to an artificial intelligence system to rewrite and revise messages of the users. Considering the existing systems, we chose chatGPT for this purpose. There are different models to connect to chatGPT through API.
In the early stages of the project, I used the **davinci** model, but due to the lack of chatGPT support for this model, I had to change it. The final model used is the **gpt-3.5-turbo-1106**.
In this application, all users' messages (based on the selected story) are sent to the chatGPT, and new messages are rewritten according to the algorithm and structure of the program.
At the end of the project, at the same time as testing different prompts sent to the chatGPT, I worked with Timo to modify and optimize the display of messages received from the chatGPT, review the feature to “end the story”, as well as reviewing and optimizing the values stored in Firebase.

Issues

A very challenging thing was the handling of the second user. The connection of two users and their story selection caused various issues. This was so challenging because the state of Firebase had to be set up to work on different devices at the same time. It was often the case that the code worked on the first device but not on the second device. Next to that Firebase came up with different errors almost randomly. The appcheck token error required to load a keystore certificate into firebase. This is a security mechanism that should protect the app from attacks. Unfortunately we could not integrate the certificate and couldn't find any way around this error. The only option was to reload the whole project to get around the error.
The adjustment of the user messages to the selected stories was another challenging aspect. It took quite some time to get good and useful responses from the gpt-3.5-turbo model.

Demovideo: https://youtu.be/e5KoYCXn_Rc

Ad Version: https://youtu.be/9P6CiLBtPFg