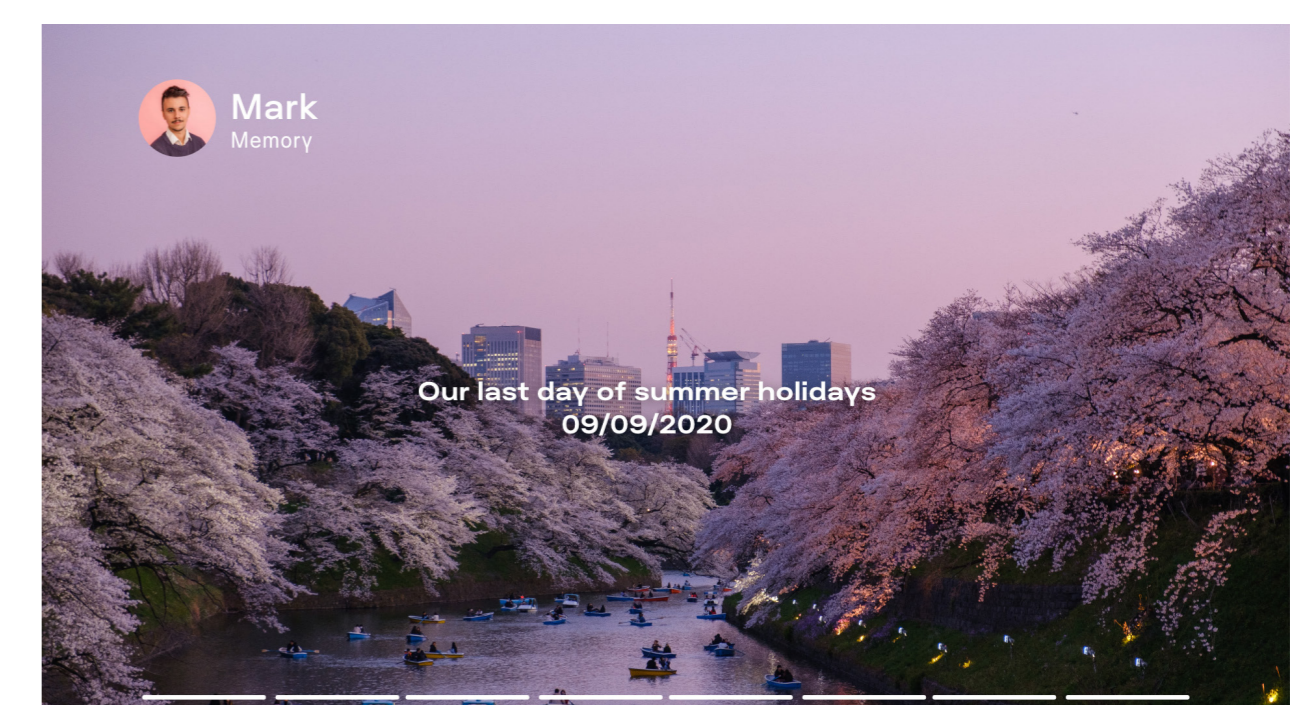
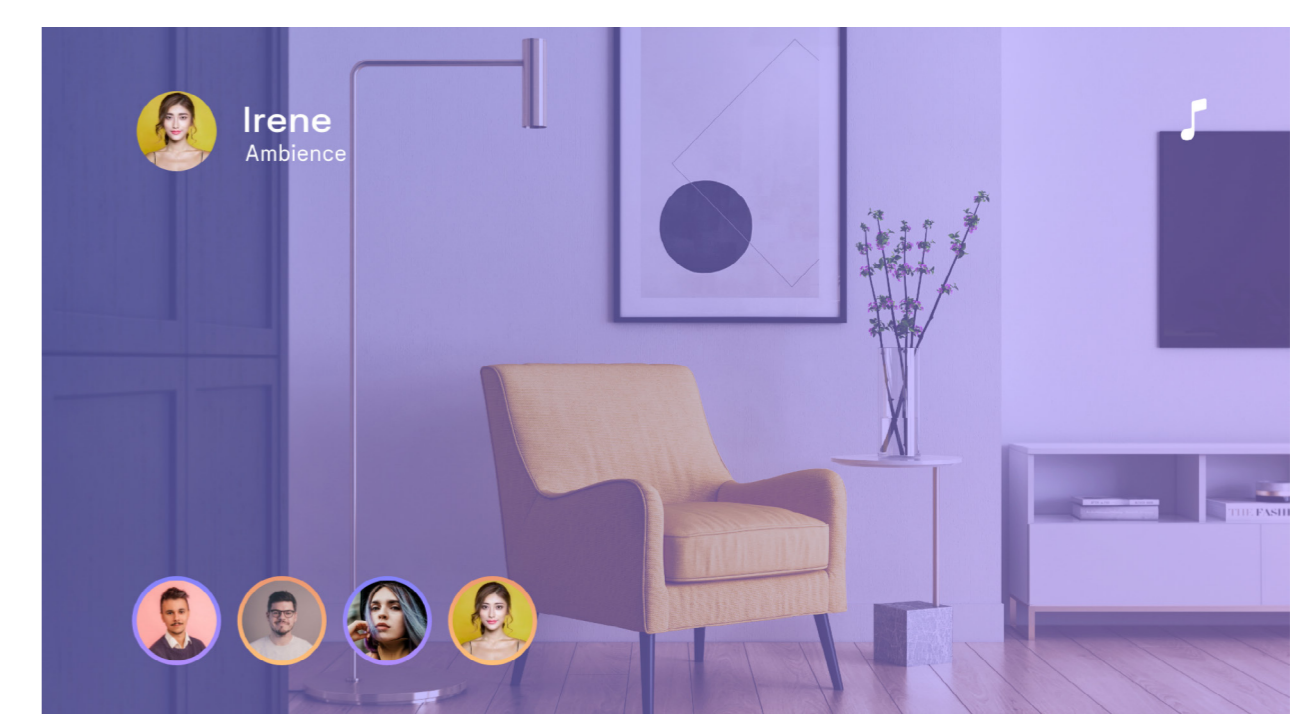
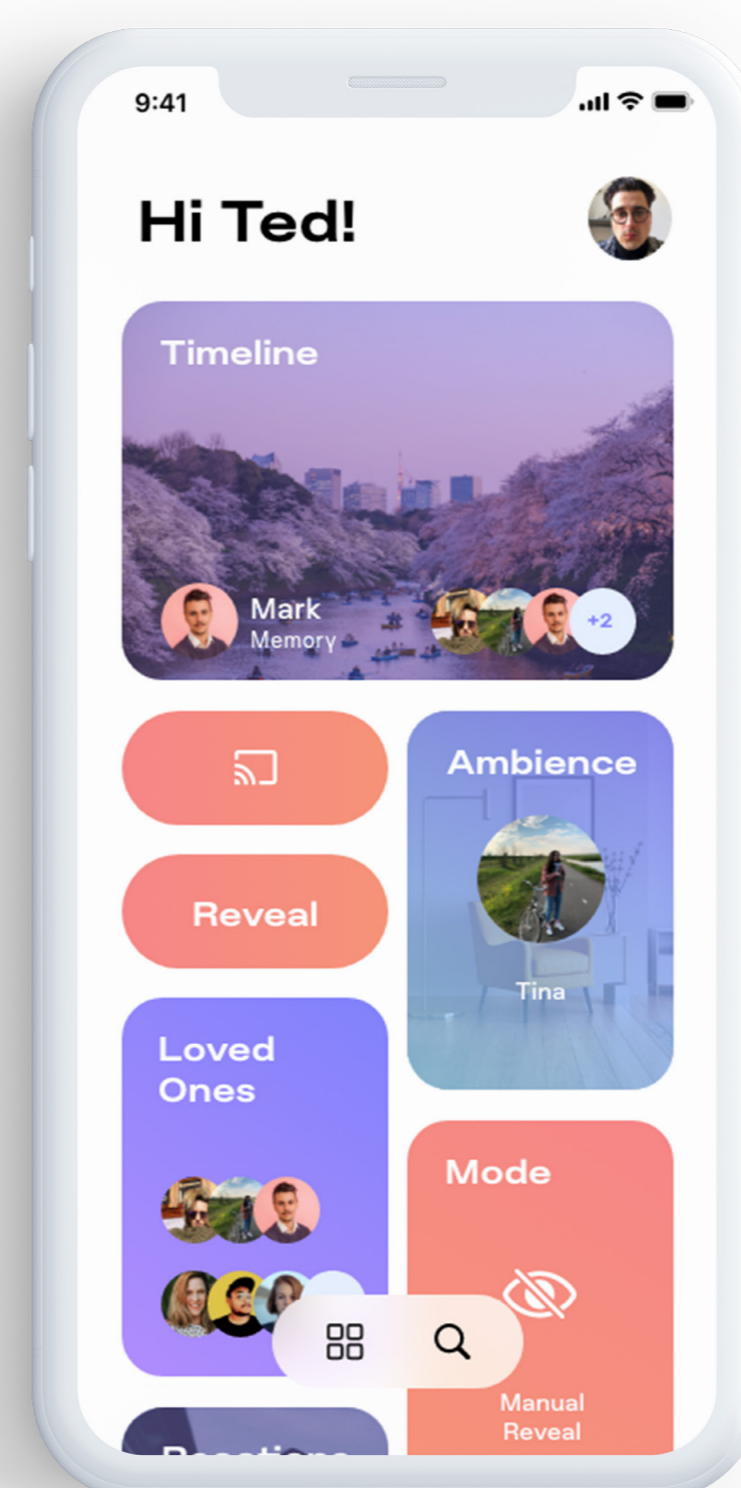
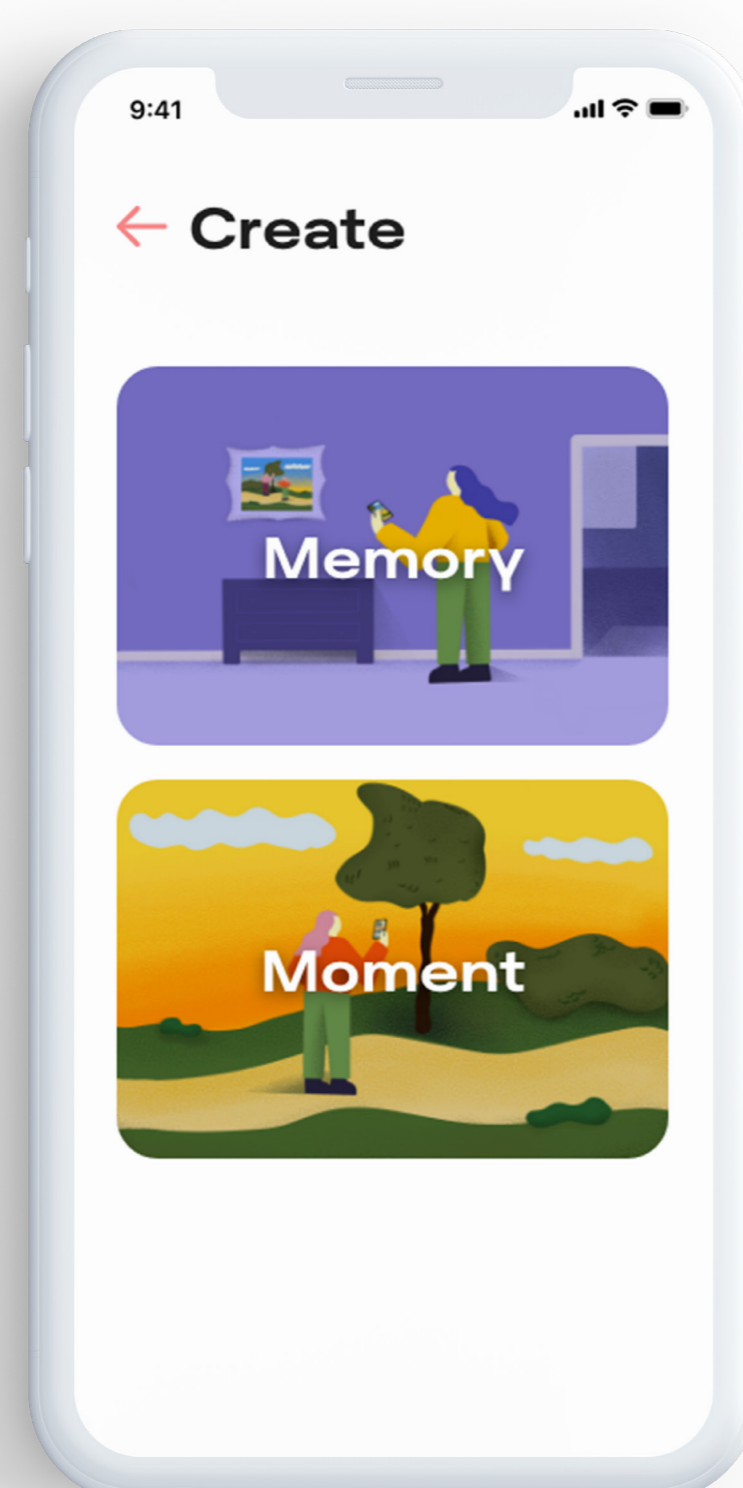
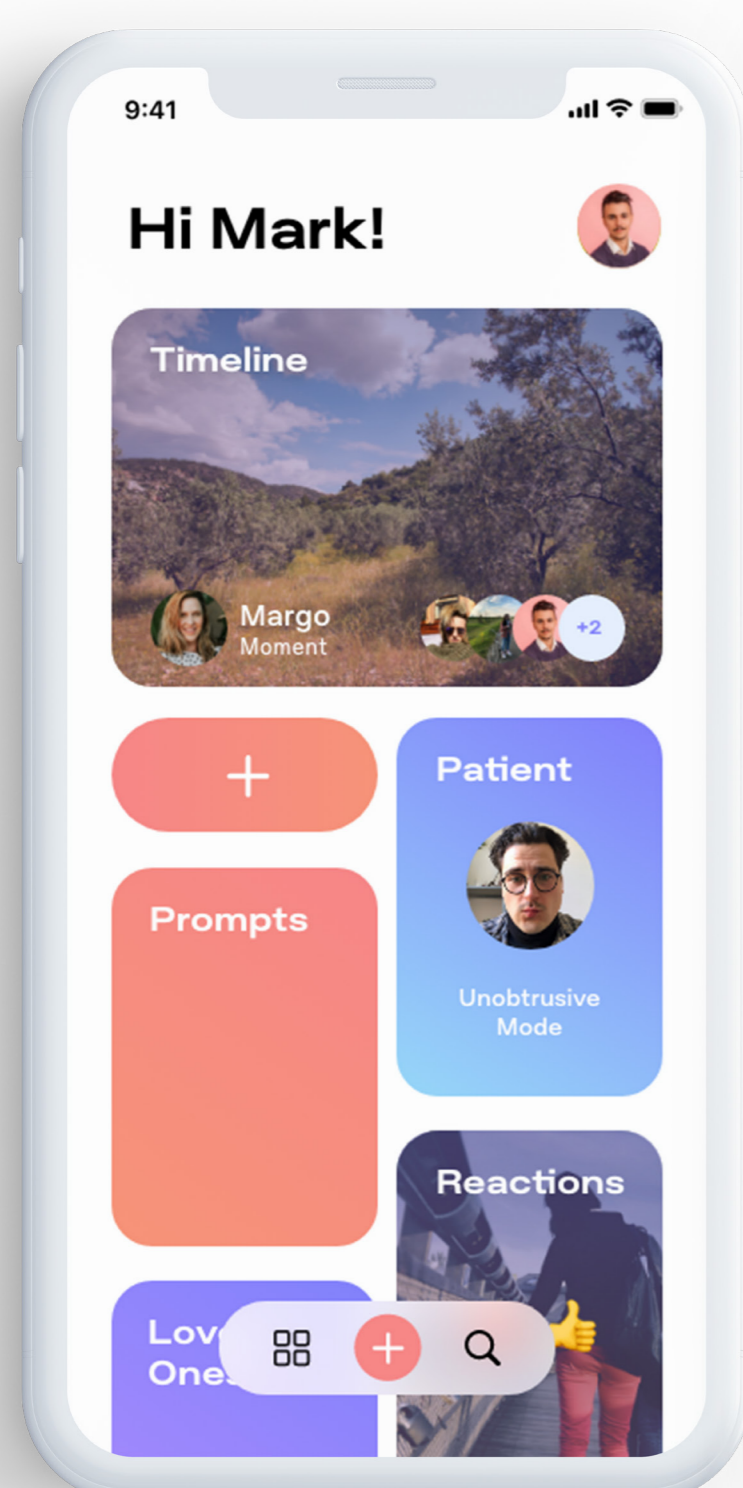




**Close**



The Close app is a concept of a mobile application designed to help COVID-19 patients feel less isolated and lonely, therefore, closer to their loved ones with whom they cannot meet. The main principle of the application lies in fulfilling the fundamental needs of the patients and its family identified throughout the research. An isolated patient feels detached from his environment and unfamiliar with the new one, which can be defined as a lack of relatedness. Other essential needs are stimulation - to be distracted and security - to be informed. On the other side, the family members want to feel close with their hospitalized loved ones. The identified needs are relatedness, competence - to know patient's feelings and state of health and foremost to have a purpose defined as a meaningful connection and knowledge on how to help.

The goal of the project is to reduce the feeling of isolation to COVID-19 patients by creating an unobtrusive connection with their family and a warm home environment. The project intended to be a rapid answer to the current pandemic and resulted in the isolation of vulnerable patients. The process started from the market research phase, where the main categories of projects, concepts, services, and consumer products were evaluated.

The outcome showed that the majority of identified solutions that tackle the problem of closeness are mobile applications. The main principles of interaction derived from the market research are: sharing the same activity, sharing an experience, evoke memories, share memories, develop a relationship.

The exploration and ideation had been made based on those outcomes resulted in the creation of three concepts: Evoke memories, Ambient participation (share experience), Active participation (share an activity). Concepts were evaluated throughout the interviews. Additionally, participants were asked about the meaning of closeness.

After every iteration, the list of requirements had been updated and led to developing two concepts the mobile application - Digital Closeness and the physical concept - Modular Closeness. The decision needed to be made; two concepts were evaluated using the Harris profile method. Results have shown the possible higher improvement of perceived closeness with faster development and implementation process than the other concept.

The Close app focuses on the discreet way of sharing memories which are the source of positive emotions and moments to send short updates to the patient, that both can serve as a distraction for the patient. App provides the patient's family with the purpose by showing them the importance of creating meaningful content. The patient is also able to send short reactions that will give the family information. Additionally, the Close app offers an ambient connection that is based on the family location. The familiar picture will be displayed on the patient's TV during his inactivity, representing the location of the patient's loved one.

Firstly, the concept had been evaluated with the AttrakDiff to assess the hedonic and pragmatic qualities and its attractiveness. Secondly, the evaluation was conducted with hospitalized ex- COVID-19 patients, a family member of the hospitalized patient, and the healthcare professional. The concept had been received significantly positively by all of the stakeholders.

Marek Torbus  
Creating a feeling of closeness between isolated patient and loved ones  
07 June 2021  
MSc Integrated Product Design

Committee

Dr. Elif Özcan-Vieira  
Dr.ir. Marieke Sonneveld  
Dr. Merijn Buijnes

