Coursework 2 Report - The Process

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Analysis

We have created an app which focuses on the clear implantation of the required features of editing a video, making it perfect for a range of people, from professional videographers and social media users to people who want to capture the moment and its beauty. The primary and most frequent users of our app include outdoor enthusiasts. Secondary users will mainly be people who edit videos for personal use or content creators. Tertiary users will include people who interact with or buy the content produced by primary and secondary users and will not use the software directly.

It also contains features adhering to various physical and psychological differences. The software includes features that accommodate auditory issues, including clear font sizes, larger buttons and UI design to make it easier for people with visual impairments. The mobile application will use all the necessary features required for editing a video to reduce complexity and make the UI easier to understand for people without experience using a video editing app. The app's main target is videographers who will utilize the app daily. For highly skilled users, the app provides detailed editing features, including the edited video timeline. It also allows its users to save the edited video, which is then available on the app's home screen. The user can re-edit these saved videos in the future if necessary. The software does not include any delete functionality in case of loss of user data by mistake. The software will be available in any environment but uploading or sharing media files requires internet access or Bluetooth.

Legally, the software does not obtain, store or sell any of the user's edited videos or personal data. Hence, the user's privacy is guaranteed unless the user decides to share or upload their files. In this situation, the user is responsible for their personally edited videos.

The software aims to run on a mobile or smartphone with any operating system. In terms of input, the app will run based on touch and touch gestures. For output, the app will use their respective screens and speakers for visual and audio supply.

Use-Case Scenarios

Scenario 1

User: Natalie (influencer)
Natalie is a YouTuber who just received a job to promote some new products for a make-up company. She used a vlogging camera to shoot the video and planned to merge different clips into a single piece with some effects.

Natalie uploaded the video from her camera to her phone using a wireless network. Afterwards, she used a video editor to edit and adjust the video. She added some effects to make the video funnier to get more viewers.

She uploaded her video to YouTube, got millions of views in one day, and became the top Youtuber in the UK.

Scenario 2
User: James (skier)

James is a skier and likes to challenge different levels of mountains. He uses a go pro to take videos when he is skiing and posts them to his social media or shows them to his friends.

One day, one of his friends, Sam, asked him for skiing tricks. He used a handheld camera to record his skiing tricks. After that, he uploaded the video to his phone using a memory card. Then, He added his narration to his video and used the slow-motion function to slow down his tricks so his friends could understand it easier.

He showed his video to Sam, and Sam is now impressed by his skiing tricks.

Scenario 3
User: Ellen (student)

Ellen is a student and has coursework about making a one-minute video to show her editing skills. She recorded different video clips using her phone and uploaded them to the video editing app. Later, she merged all the video clips into a single video and cut the unwanted part. She also added transitions and subtitles to make her video look more attractive.

After submitting the video, Ellen got a good grade for the coursework.

Iteration 1 – Design Layout

Prototype
The main aim of the first iteration is to create a layout for the app and implement it. As this is the first iteration, a basic structure was made to arrange the initial layout and the features, which will later be added in the coming iterations. The initial layout lags behind specific working features and colours as this has yet to be fully considered but has focused on the app's main UI and simple wireframe.

The app opens up to the logo screen, which will fade out to show the projects with existing edited videos and allows the user to add new projects. Doing a new project and editing videos has certain non-working features in this iteration, following a familiar layout inspired but multiple similar apps like Capcut and VLC. The app allows users to check their timelines and export their edited videos.

Since this is the first iteration to decide on a layout, five different layouts were created by each group member. The final layout was decided on together as a group with the help of a questionnaire created.

Code
As there is minimal functionality as a simplistic layout between the prototype and implementation of the first iteration, there is not much difference between the coding.
The working of the code can be found https://www.youtube.com/watch?v=bOWaq8VsWfk

Evaluation
For this iteration, a questionnaire was created and sent to people who have used another video editing app or intend to use one in the future. We received 50 answers, allowing us to receive answers from professional photographers to users who will use it in their daily lives. The questionnaire enabled us to receive feedback from multiple users allowing us to be able to make an easy-to-use layout.

Questions:

- Have you ever used a video editing app?
- If yes, for what purpose have you used the app?
- Is this layout easy to understand and user-friendly?
- Which layout do you like the most among the five shown?
- Which features do you use the most while using a video editing app?
- Are there any other features you would like to add to the layout you chose?

Outcomes of Evaluation:

On evaluating the responses we received, it was concluded that the layout chosen included all the features the users wanted to help edit a video. The questionnaire also allowed us to create a clear and easy-to-use app which all users, even those who have yet to use an editing app before, can easily understand and create.
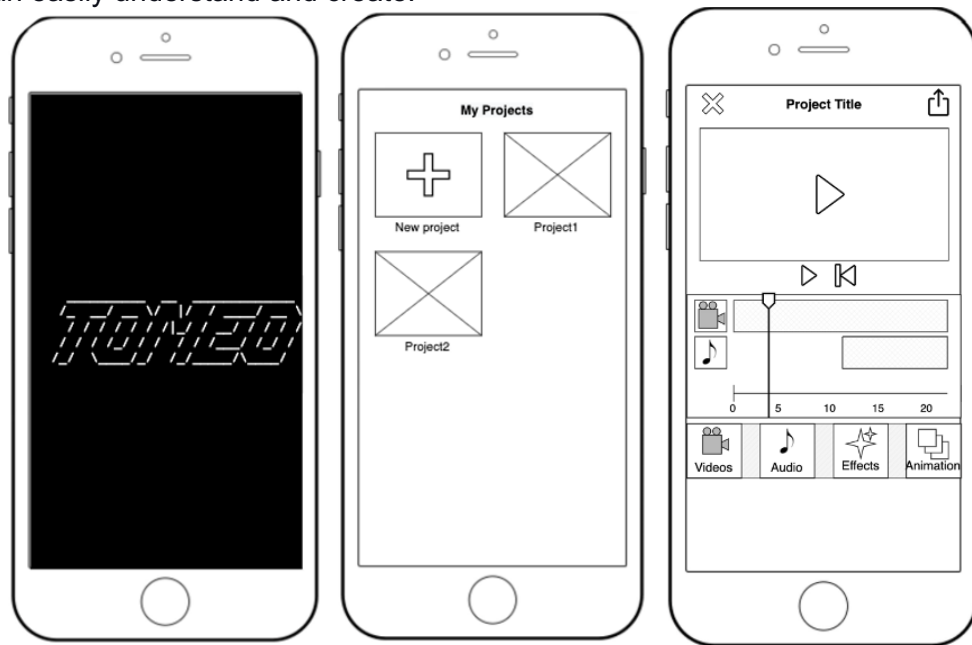
Iteration 2 – Adding features

Prototype

Based on the prototype in iteration 1, we made a few amendments to the app user interface. According to the questionnaire in iteration 1, many respondents thought the text editing, filter and sticker functions should have their buttons but not in the effects function to make it easier to edit. The effect button is now removed, and the text editing, filter and sticker button will be added to the toolbar. Users can change the filter of the video by choosing the filter function on the toolbar. The app's colour has not been considered but has focused on improving the wireframe and making it user-friendly.

Code

The app's wireframe is created, and the buttons are placed correctly. The wireframe of the app is similar to the initial layout of the app. There is a close button on the upper left and an export button on the upper right. The video and toolbar are placed in the middle of the app, and the thumbnails of the videos are at the bottom. In addition, when the user clicks on the export button, it will show a new window to allow the user to share their videos on TikTok and

YouTube. However, the colour theme of the app is still black and white, it will be decided in iteration 3. As the application is made for smartphones, the user can scroll through the projects using touchpad using two fingers horizontally or using touchscreen.

The working of the code can be found https://www.youtube.com/watch?v=5uQLLmvLIjc

Evaluation

We used respondents' feedback for this iteration to improve the app's layout. We have made a few changes to the app layout to make it more accessible and user-friendly. On the Trello board, different group mates are focusing on different areas. Some of us are focusing on the report, and some are focusing on the code part. We have worked together to make the project well-functioning.
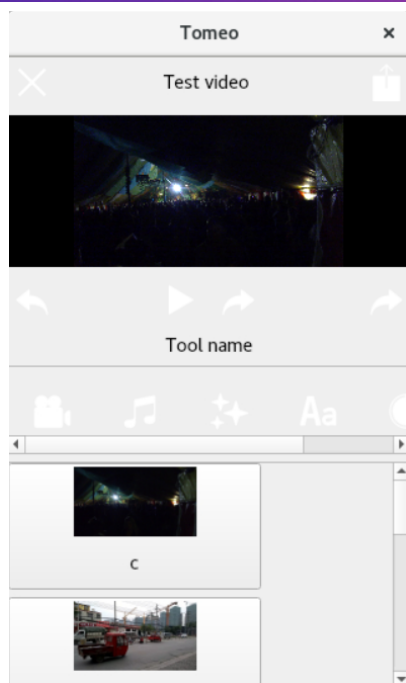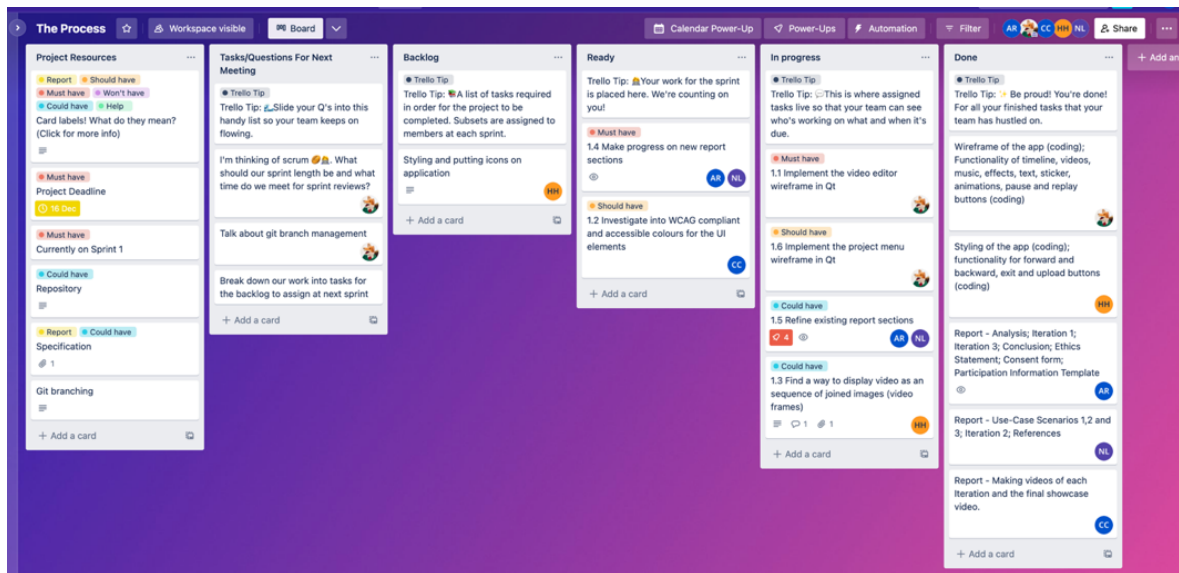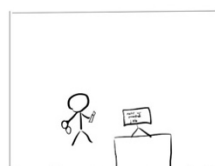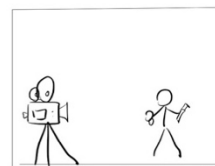
Outcomes of evaluation
Colour is an essential part of the user-friendly interface. For instance, an app icon is the first thing customers see and experience. We want it to be good and encourage users to download our app. (Kachan, 2019). [1] From the interview, green is the most recommended colour for the app. More than 65% of interviewees agreed that green strongly connects with nature and can help them feel relaxed.


Iteration 3 – Screen colouring and final Refinement

Prototype
Since most of the features have been defined and brought to work, we started working on the user interface's final refinements and colour schemes. In this iteration, we remove unnecessary elements and finalise the layout providing an easy-to-work-on user interface to the user.
We have made the screen black, which white symbols and writing allowing clear visibility to the user. Once a feature, supposing the undo button, is selected, the button turns green, highlighting it and allowing the user to know which feature they are using.

Code
Since the application is almost complete, there are only minimal changes to the code, as the colouring has only been changed.
The working of the code can be found https://www.youtube.com/watch?v=PZDd0EuDPbM
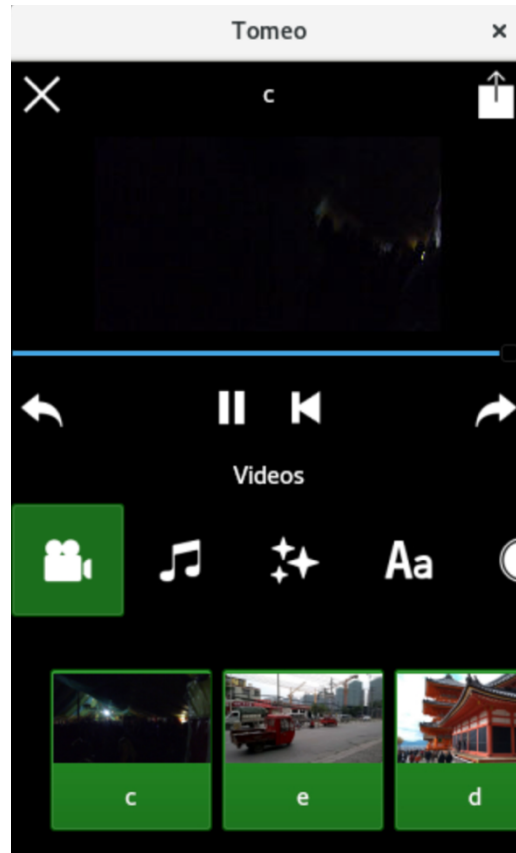
Evaluation

For this iteration, since we have finished making the application, we decided to interview people showing them the working and User interface of the app and asking questions related to it to get feedback from them.

Questions:
- Would you prefer using this application to edit videos?
- What are your thoughts on the layout?
- Are you satisfied with the features provided in the app?

Outcomes of Evaluation:

After evaluating the response, we got from the interview, a higher range of interviewees seemed satisfied with the application and the user interface shown to them. Many users commented on the simplistic and easy-to-use design of the application. The users agreed that the application gives them enough features to edit their videos and get satisfactory results.

Conclusion

After all the iterations, the application can play the users' videos and create multiple projects to edit different videos. It can pause and undo and redo changes made by the user and add effects to the edited videos and music. The user can also export the edited video to upload on their social media or save it to the library on their smartphone. However, due to constraints on the Tomeo Application, there are certain features that the application cannot provide, such as embedded connectivity to the internet or Wi-Fi and control of the audio in the video being edited.. There are other limitations to the app, such as no subtitles provided and not having embedded voice recognition. These features could not be added due to time constraints. In the future, the application aims to add these features and many more, making the application perfect for the targeted user audience.

The final working of the application can be found
https://www.youtube.com/watch?v=fnO9mHOX-lA&feature=youtu.be

Ethics Statement

All the data taken or received through the questionnaires and interviews have followed the University of Leeds Regulations for Ethical Research on Humans. Consent forms have been given to every participant so that they understand the full scope of the project and the data they are given, which will be used for only this project's purpose. The sheets given to the participants have been attached alongside this document.

References

1. Kachan, D. 2019. Principles of color psychology in Mobile Application Design. *Principles of Color Psychology in Mobile Application Design*. [Online]. [Accessed 15 December 2022]. Available from: https://medium.com/sketch-app-sources/principles-of-color-psychology-in-mobile-application-design-8d338144ffff.