METU, Department Of Computer Engineering

Graduation Project

Proposal Form

(Please read carefully, and follow the instructions to prepare the project proposal form.)

(Instructions to fill in this form are given in italic fonts and in parentheses.)

(To provide an input for a section of the form, delete the instruction and provide your input in place of the deleted instruction. In the final form that you will submit, there shouldn't be any instructions left over, including this section of the form.)

(If you feel that a particular instruction is not relevant to your project proposal, please use a proper explanation for this, rather than ignoring the instruction.)

(The final form should not exceed 4 pages, excluding this page and including the References section. Please use Arial, Normal, 10pt fonts and single line spacing.)

Important Notes

A project could be proposed by (i) a student group, (ii) a company, or (iii) a faculty member of the department by filling in this form and submitting it to 49x-proposal@ceng.metu.edu.tr by e-mail. For a project proposal, there might be a sponsoring company supporting the project and providing some form(s) of resources for the project.

If your proposal might contain a patentable idea or any type of intellectual property, please first make sure to follow appropriate steps (apply for a patent, etc.) before sending your idea to us. Once this form is received from you, the instructor(s) and the department has no responsibility regarding to intellectual properties of your project/idea.

All sources and documentation developed for this course are assumed to be public domain (GPL, CC or similar license) by default. If you need any exception for license and disclosure of project work, please specify this in detail in IP section of the form.

Please note that source codes, documents and issue tracking should be kept in department servers. No restrictions can be requested for limiting faculty and assistants access to student work.

Project Information

Title

COVE (Collaboration on Video Environment)

Target

Public [] Restricted [✓]

Proposer Information

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• IP (Intellectual Property) Information

The project will be a free software.

Project Description and Background Information

Description

- In our project, we will design a mobile application on Android platform for music video sharing and a social networking.
- Tales is a platform that helps you discover and leverage the talent in your social network.
 With Tales, finding trustworthy and passionate people with the skills you need can be
 done instantly. You're also helping those close to you get discovered for what they really
 love doing.
- Users can login with their Facebook or Google accounts.
- Users will have timeline and this timelime consists of three tabs and two buttons. Tabs
 are for most viewed videos, the videos from other users which are followed by the main
 user and discover tab which shows popular videos from users not followed by the main

- user. One of the buttons is for searching keywords and the other one is for showing instrument categories.
- Users can use other users' videos and record their own sounds over them. This must be done with the permission of the original user. For example, one user uploads his guitar playing video with him playing "Stairway to Heaven". Then another user decides to add another instrument to that user's video and records his own video using both the first video's sounds and his sounds. After recording it, the app shows the original user the final version and requests permission from him to publish it. If he allows it, the video gets uploaded.
- Viewers can watch whichever video they want on this combined system. For example, 4
 people collaborates on a video one after another; then the viewer can choose to watch
 any one of them from the 4th user's video.
- Videos will have "Used by" numbers beneath them that shows the users who used this video and their new videos.
- A main feature of the app is that users can choose to separate instruments in the
 combined videos. To give an example, one person uploads a guitar solo and another
 person plays flute to this person's video, and another one adds vocals. The viewer can
 choose to listen to any instrument combination they want. Viewer can eliminate flute from
 the video and just listen guitar and vocals. There will be instrument buttons below the
 video that the user can enable/disable instruments.
- Users have their own channels and they will upload videos recorded by themselves. They need to use the app to record the videos to ensure originality and authenticity.
- There will be a background noise filter which the users can use to filter out unwanted noise.
- Users can create band channels and invite other users to play together.
- These videos will be restricted to a specific maximum time like 4~ mins.
- At start, the project will be focused mainly on music, but later other talent categories like sports can be added.

Similar Products/Projects

The main idea is similar to Youtube on video sharing and user channel system but this application is different in every other way.

Video recording and uploading system is similar to Snapchat. People can only use their own Android devices.

Justification of the proposal

The purpose is to let nonprofessional people demonstrate their musical talents to everyone
and allow socializing by using other user's videos and forming bands. There isn't any
platform that the people can use to socialize, have fun and show their talents to everyone.
We aim to provide that service.

Contributions, Innovation and Originality Aspects of the Project

The originality of the project is that it allows video combining and separating instruments.

There isn't any project that target the same problem area of our proposal that we know of. Our technique which allows people create bands is an original idea.

It is mainly based on a social network and it doesn't have many additions to technological developments.

Technical Aspects of the Project

We will work on database systems, GUI (graphical user interface), Java for Android. The biggest technical aspect is the sound combining and separating and normalizing.

Targeted Output, Targeted User/Domain Profile

Targeted user profile is everyone who wants to show their musical talents and collaborate on songs and the people who enjoys listening to amateur musical talents..

Project Development Environment

We will not use hardware at the beginning but after a while if we need servers to store videos, we will rent servers. For software, we will use SQL, Java, some GUI applications and a web server.

References

youtube.com snapchat on play store