



Assignment 3:

Create a Mind Map

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Section	4
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Map Description

YouTube is a well-known online video-sharing website that allows users to publish, watch, and share videos. YouTube provides diverse material, such as music videos, vlogs, tutorials, movie trailers, instructional videos, and more.

The YouTube mobile application is the version of YouTube that has been specially developed and optimized for smartphones and tablets. It lets users view and watch YouTube videos on their mobile devices by providing a user-friendly interface and mobile-specific functionality. YouTube has a mobile application for iOS (Apple) and Android smartphones. It is available for free download through the relevant app shops, such as the Apple App Store or the Google Play Store.

YouTube mobile application is a widely used video streaming platform among mobile users. Viewers of YouTube use this mobile application to watch videos and audio for entertainment and informative purposes. One common pain point viewers of this application face is that the YouTube mobile application can only run on the main screen of a smartphone/tablet, not allowing the viewers to switch screens while listening to music or some audio content. This makes the users pause whatever they are listening to in the YouTube mobile application to do other activities on smartphones, making them uncomfortable returning YouTube to the main screen every time while multitasking. This may give space for other audio/video streaming mobile applications, such as Spotify, Instagram, and Amazon Music, to take over YouTube's market share, which may lead to losing its market position.

The central vision of this project is to develop a new feature that allows viewers to run YouTube content on their smartphone's background, addressing their pain points. This feature will enable users to navigate between screens while watching or listening to YouTube content. It also minimizes the YouTube mobile application screen to a small, convenient, watchable screen running in one corner of the smartphone devices. At the same time, viewers work with other applications, which allows them to multitask effectively without pausing or moving between screens to listen or watch content.

The mind map focuses on the topic of "Background streaming capability" and the aspects associated with this feature for development. This gives a comprehensive review of the various facets involved with the feature. Several essential subtopics were chosen to break down the concept based on its relation to the background streaming functionality. The mind map's scope includes the main parts of the background streaming function, such as its:

- **Features:** It focuses on the precise features and qualities the background playback functionality should have. Each component described under this subtopic highlights a distinct aspect of the function that improves the user experience while allowing for background playback.
- **Technical requirements:** This looks into the technical concerns and prerequisites for implementing the background playback functionality. It covers topics such as video streaming optimization, audio handling, compatibility with various operating systems, bandwidth control, and security and privacy safeguards.
- **Costs:** It discusses the costs of designing, implementing, and maintaining the background playback functionality. It comprises development and testing, API integration, infrastructure, maintenance and upgrades, and marketing and promotion costs. Consideration of these expenses is required for successful planning and resource allocation.

- **Revenue models:** It considers the various income streams the background playback capability may create. It offers several monetization options, including advertisements, premium subscriptions, Freemium (increases views and usage), brand partnerships, API integration, and content licensing.
- **Stakeholders:** This identifies the significant stakeholders engaged in developing and implementing the background playback feature. The development and testing team, user groups, API partners, content partners, advertising partners, cloud service providers, third-party integrations, and executives/management are all part of it. Engaging with these stakeholders is critical for effective cooperation and feature uptake.

This map gives a high-level overview of the many aspects that must be considered while designing and executing this feature.

The mind map excludes implementation-specific elements such as programming languages, exact revenue & cost statistics, hardware revisions, required changes on the YouTube mobile application, data-specific information on the feature and technical considerations, detailed stakeholders involved, risks involved, or explicit stakeholder responsibilities. These elements can be investigated and elaborated upon based on the project's unique context and requirements.

Mind Map

Please find the pdf file attached.

Elements involved with background streaming capability

