Project Plan
Smart Automatic Video Creation
The Capstone Experience
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Fall 2019
Functional Specifications

• Auto-Generate videos based on scripts.
• Using a web application to manage users and projects.
• Uses a translation service to work for multiple languages.
Design Specifications

• Consistent with TechSmith’s branding and color standards.
• Display and edit the text summary and keywords generated from the input text.
• Simple interface to quickly create, manage, and edit projects.
Screen Mockup: Main Page

Welcome

Smart Automatic Video Creation

Automatic Video Generator

Automatically convert information to presentation-style video with translation service

Start My Video Project

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Screen Mockup: Text Input Page

Input your article, script, or outlines here

Translation

Project Name

SUBMIT

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Screen Mockup: Video Review Page
Screen Mockup: Projects Page
Technical Specifications

• ReactJS and Bootstrap front end.
• C# with .NET Core API for web application.
• NodeJS with FFmpeg video render engine.
• Various external APIs for text analytics and asset gathering.
System Components

• Hardware Platforms
  ▪ Microsoft Azure
  ▪ Docker
  ▪ Azure SQL Database

• Software Platforms / Technologies
  ▪ C#/.Net Core
  ▪ ReactJS/Bootstrap
  ▪ FFmpeg
  ▪ Azure Storage
  ▪ External APIs
    o TechSmith Assets
    o Bing Entity Search
    o Microsoft Text Analytics
Risks

• Copyright Issues
  ▪ Some assets that our program will search for may contain copyrighted material that we cannot include in our videos, such as company logos or copyrighted music.
  ▪ We will choose a collection of assets that does not include copyrighted material to use in our program or include specifications that ignores assets that violate this requirement.

• Different Types of Scripts
  ▪ Scripts can be in many different forms, such as news articles, education papers, or even things like poetry.
  ▪ Experiment with different APIs to see which one works best with all types of script compilations.

• Matching Music to Sentiment
  ▪ We want to find music for the videos that matches the sentiment of the given script.
  ▪ We will try to use a collection of music that can be narrowed down by searching for the mood of the music.

• Text Analysis in Other Languages
  ▪ We need to be able to analyze the sentiment of the given text in order to add fitting music to the final video.
  ▪ We are going to explore different options for text analyzing APIs and determine which one works best for different languages.
Questions?