

MICHIGAN STATE
UNIVERSITY

Beta Presentation

Insight Weaver AI

The Capstone Experience

Team TechSmith

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From Students...
...to Professionals

Fall 2025

Project Overview

- Video editing is difficult and time consuming.
- IWAI can produce professional and cohesive videos from uploaded content in minutes.
- Agentic AI will analyze video content, and create 3 videos that the user can choose from.
- Once chosen, the user can either proceed straight to sharing/downloading or further refine their video using AI chat.



Team Member's Technical Tasks

Technical Tasks Assigned

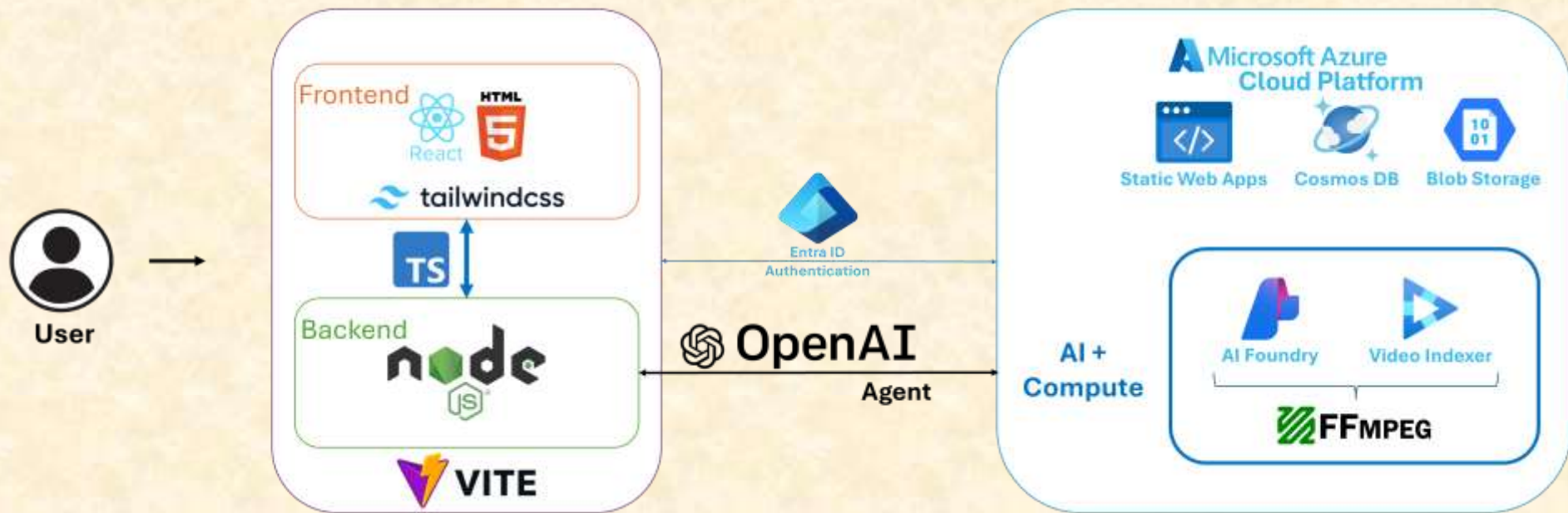
- Trevor Burkis
 - Azure Integration: Authentication, SWA, Database APIs, etc
 - AI Agent&Tools: Create 3 preview videos + Edit videos
 - Ffmpeg: Video combination, cutting, trimming, rendering
- Hama Pashazedah
 - Video Indexing, analysis
 - Database APIs
 - Landing Page workflow and UI
- Tuan Hua
 - Upload page UI and logic
 - Database setup for cosmos db and blob
 - API logic for file handling
- Ky Vu
 - Project thumbnails
 - Download and sharing logic
 - UI improvements on every page
- Martin Sattam
 - AI Chat back and forth
 - AI Agent created which can call tools
 - Ffmpeg tool created to add video segments
- Naod Ghebredngl
 - Cut/Speed tools for agent
 - Auto refinement agent
 - Persona AI Agents

Technical Tasks Completed

- Trevor Burkis
 - Azure integration into every corner of project
 - AI Agents intelligently created/edit videos
 - Ffmpeg functions to do heavy lifting of video editing
- Hama Pashazedah
 - Video Indexing, analysis
 - Database APIs
 - Landing Page workflow and UI
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System Architecture



Upload Page



Landing Page

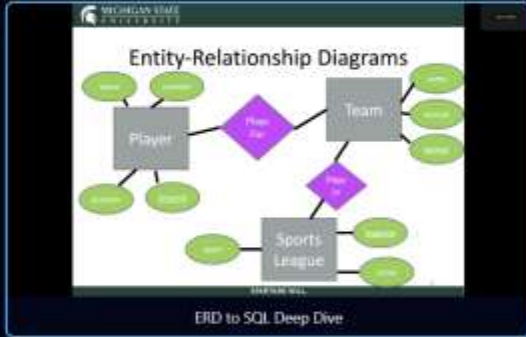


TechSmith[®] Insight Weaver AI

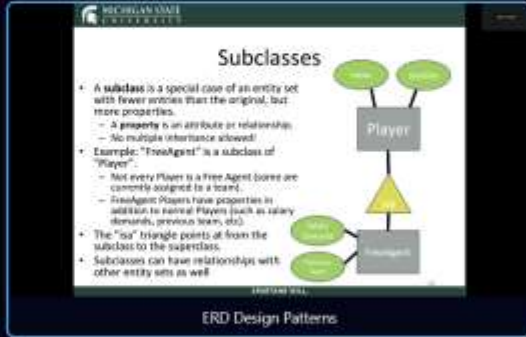
All videos ready!



ERD Quick Overview



ERD to SQL Deep Dive



ERD Design Patterns

See your previews!



Preview Page

The screenshot shows the 'Insight Weaver AI Preview Page' by TechSmith. The interface has a dark blue theme. At the top left is an 'Upload' button. The top center features the TechSmith logo and the page title 'Insight Weaver AI Preview Page'. At the top right is a 'Select Video...' button. The main area is a large dark rectangle with the text 'Select a video to preview'. On the right side, there are two panels. The 'Video Options' panel lists three video thumbnails with titles and durations: 'ERD Quick Overview' (7:54), 'ERD to SQL Deep Dive' (21:57), and 'ERD Design Patterns' (19:35). The 'Video Description' panel below it contains the text 'Select a video to see its description.' At the bottom, a light blue banner contains the text: 'Please choose 1 of 3 IWAI edited videos for more information and previewing. To access more advanced editing features, click the button on the top-right to navigate to the Refine page.'

Upload

TechSmith® Insight Weaver AI Preview Page

Select Video...

Select a video to preview

Video Options

- ERD Quick Overview
Duration: 7:54
- ERD to SQL Deep Dive
Duration: 21:57
- ERD Design Patterns
Duration: 19:35

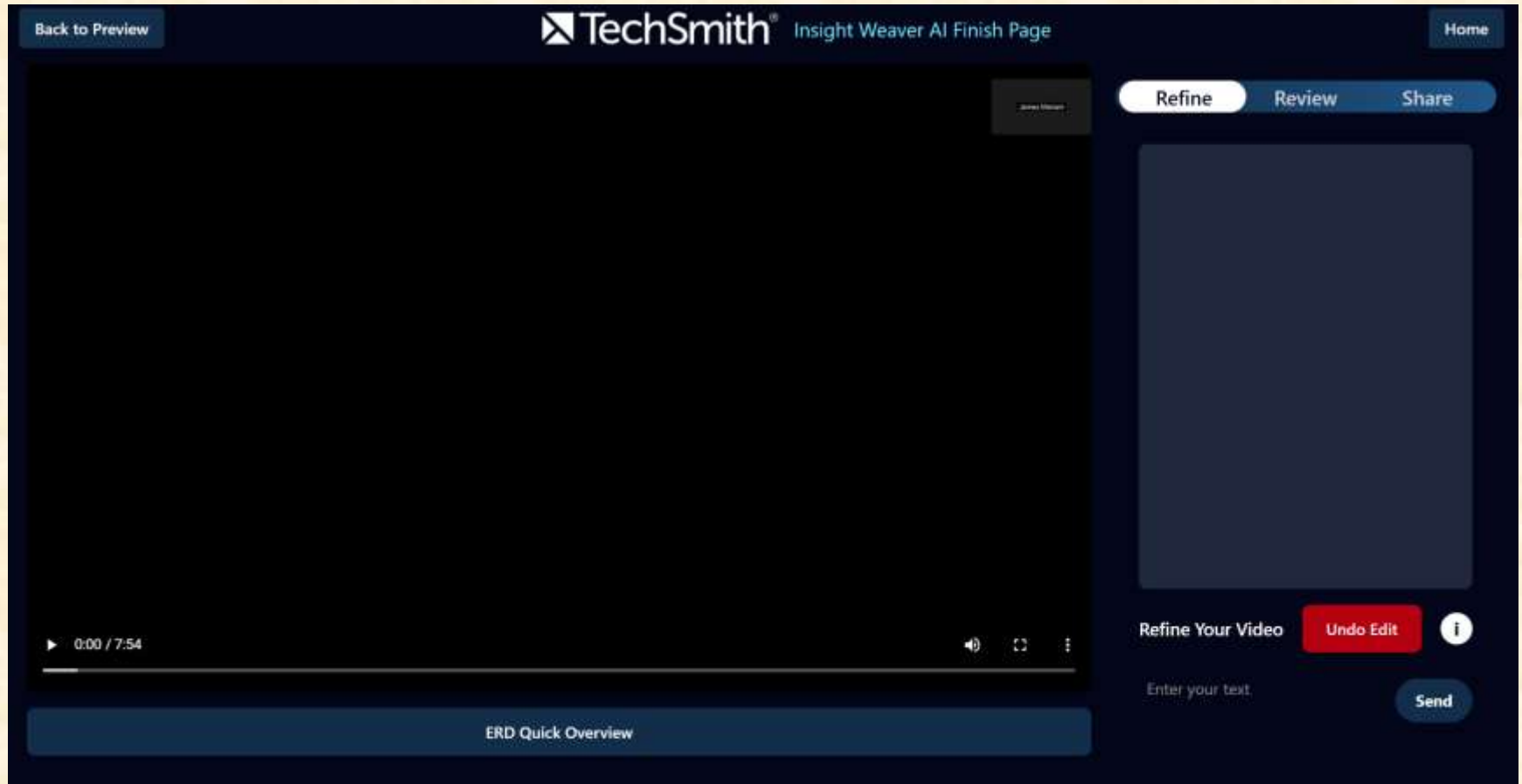
Video Description

Select a video to see its description.

Please choose 1 of 3 IWAI edited videos for more information and previewing. To access more advanced editing features, click the button on the top-right to navigate to the Refine page.



Finish Page



What's left to do?

- Features
 - Nothing!
- Stretch Goals
 - Included all stretch goals already
- Other Tasks
 - Minimize inputs & clicks
 - Make each step more distinct and obvious



Questions?

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