MICHIGAN STATE UNIVERSITY

Project Plan American Sign Language Learning App

The Capstone Experience

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Project Overview

- Learning and teaching tool
- Interactive
- Student watches YouTube video
- Records themselves and sends to teacher
- Teacher annotates and critiques

Functional Specifications

- Record Video
- Send/Receive Video
- Watch Video
- Annotate Video
- Tag Video
- Rate Video

Design Specifications

- Support two types of users
 - Teacher
 - Student
- Must encourage interaction with device
- Have intuitive user interface
 - Navigation based on tasks instead of functions

Screen Mockup: Landing Pages

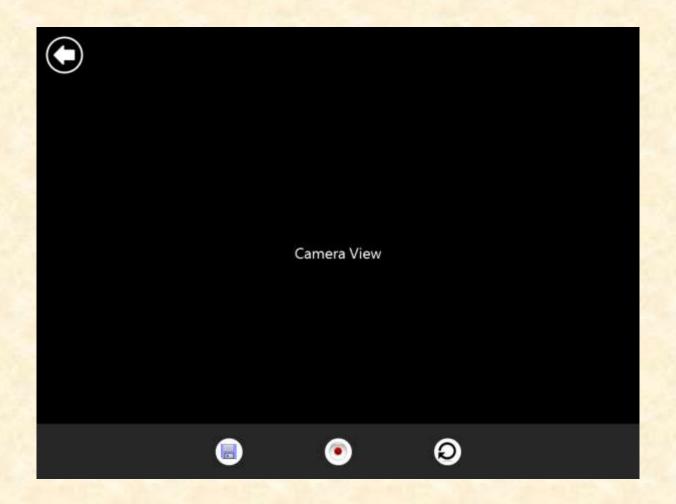
Student landing



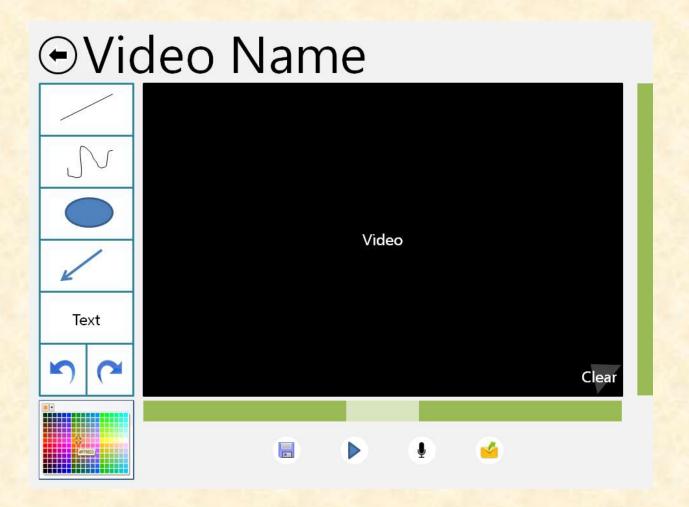
Teacher landing



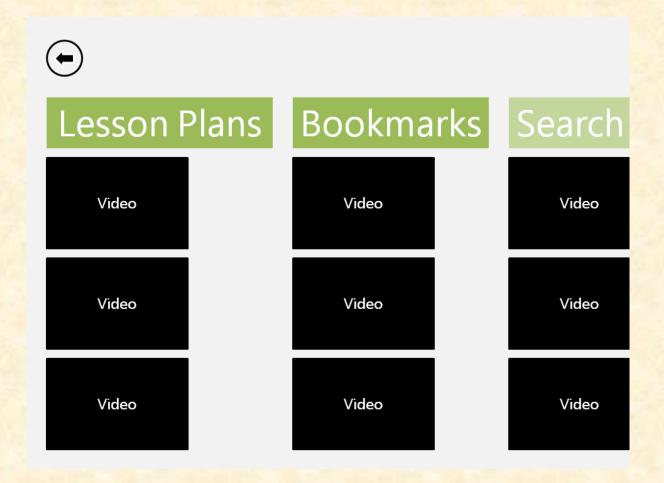
Screen Mockup: Record Screen



Screen Mockup: Annotate Screen



Screen Mockup: Video List

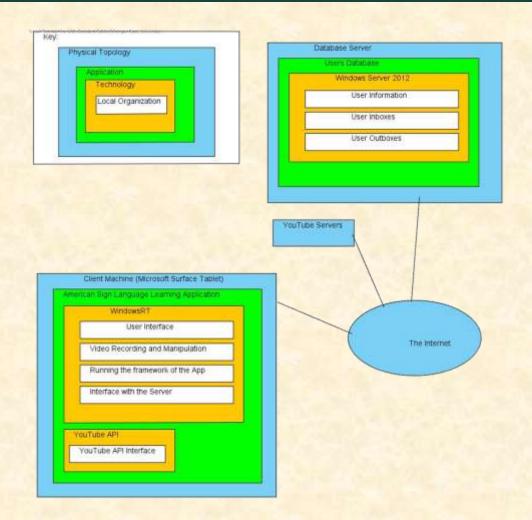


Technical Specifications

- Windows Server 2012
 - Sending videos between Students and Teachers
 - Store user information
- YouTube API
 - Search, Bookmark, Watch
- Windows RT
 - Video editing Libraries
- Visual Studio Express 2012



System Architecture



System Components

- Hardware Platforms
 - Microsoft Surface Tablet
 - Other Windows 8 Tablets
 - Server
- Software Platforms / Technologies
 - Windows RT

Testing

- On development system
- Then on device
- Test cases following:
 - Work flow
 - Use cases
- User testing

Risks

- How to develop Windows RT apps?
 - Relatively new development environment
 - Tutorials
- How do we maintain our servers?
 - No experience dealing with them
 - Research
- How do we annotate video?
 - Major project feature
 - Use examples from a previous course
- How do we test our app?
 - Time constraints
 - Following a process before writing code