IOWA STATE UNIVERSITY EE/CPRE/SE 492 Spring 2021, Team sdmay21-02



Application for Sharing Interesting Zoo & Aquarium Videos to Social Media

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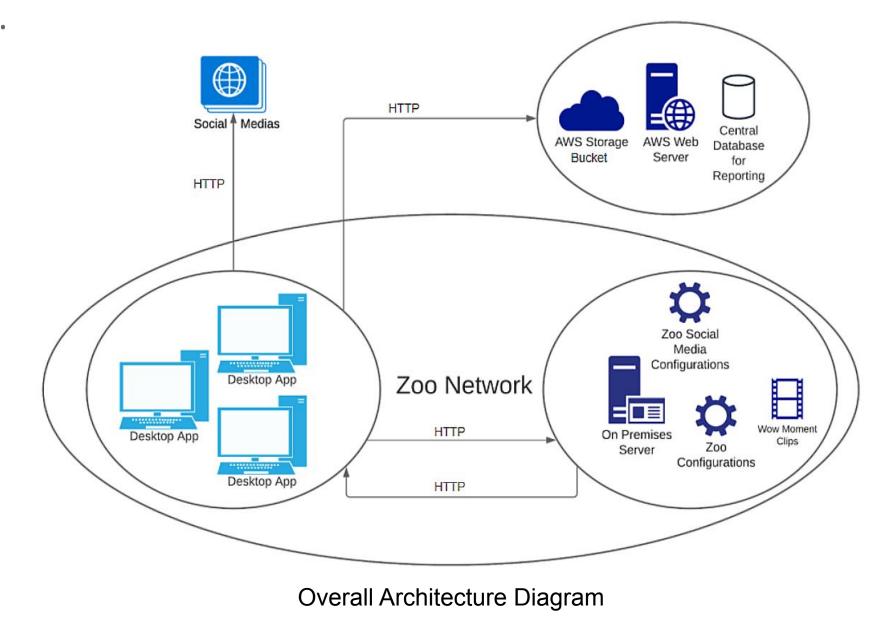
Faculty Advisor: Dr. Alexander Stoytchev Client: True360

Introduction

- **Problem** True360 wanted a quick way for customers to share **WOW! Moments** to different social media platforms.
- What is a **WOW! Moment**?
 - Interesting animal moment captured on video (e.g. Red Pandas eating and climbing trees)
- **Solution** Create an in-house social media sharing platform.
- Target audience is Zoo & Aquarium employees.

Design Requirements

Functional	Non-functional
Cross-platformSocial media	Easy to useComply with social





- Video analytics
- Video formatting based on platform.

media TOS

Built to last and scalable/easily updated.

Design Approach

- Agile Development Model
 Weekly Spring Meeting with Client
- Iterative Planning

Project Resources

- No budget provided
 - Could not use premium API features
- AWS Cloud

Testing

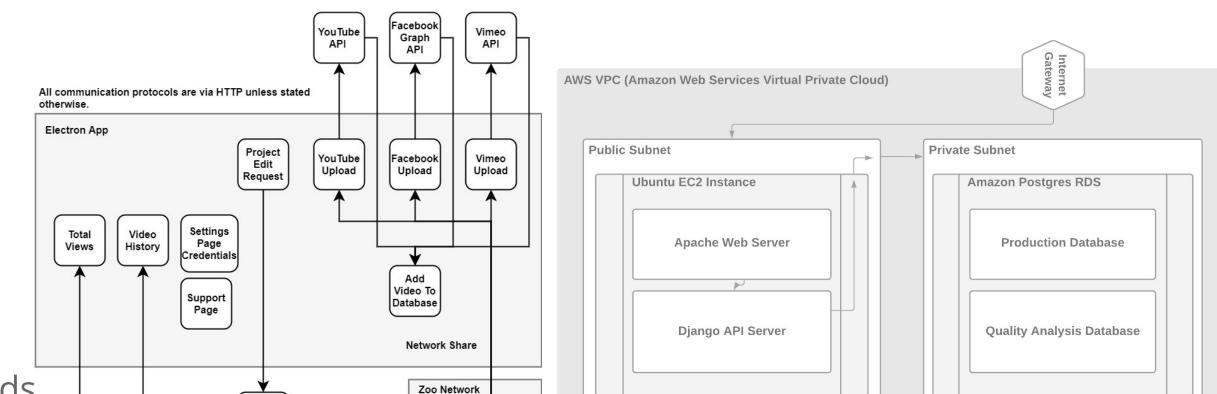
- Electron App
 - Jest Automated Unit Tests
 - Spectron Automated E2E Tests
- Django
 - Unittest Python Module

IEEE/ISO/IEC 24748-5-2017 - ISO/IEC/IEEE International Standard - Systems and Software Engineering--Life Cycle Management--Part 5: Software Development Planning

- IEEE/ISO/IEC 23026-2015 ISO/IEC/IEEE International Standard Systems and software engineering Engineering and management of websites for systems, software, and services information
- IEEE 1016-2009 IEEE Standard for Information Technology--Systems Design--Software Design Descriptions

Technical Details

- Electron Front-end
 - Cross-platform
 - Access to Node.js Ecosystem
- React
 - Strong component system
 - > Seamless integration with Electron
- Django



WOW!

Moment

Standards

- Follows True360 programming standards
- Unique API Keys for each Institution
 - Helps avoid hitting API Quotas

True360 WOW! Moment™ Publisher		3773	×
	Username		
	testuser		
	Password		
	Login		

1. Login screen for individual institutions

Publish on Vimeo	Make this video 3D
Thumbnail Upload a picture that shows what's in your video. A good thumbnail stands out and draws attention. Learn More Choose File No file chosen	Playlists Add your video to one or more playlists. Playlists can help viewers discover your content fast. Learn More None
Privacy and Publishing Anyone can see this video	Publish Now
Only I can see this video	O Schedule
 Only people who follow me can see this video Only people I choose can see this video 	mm/dd/yyyy:

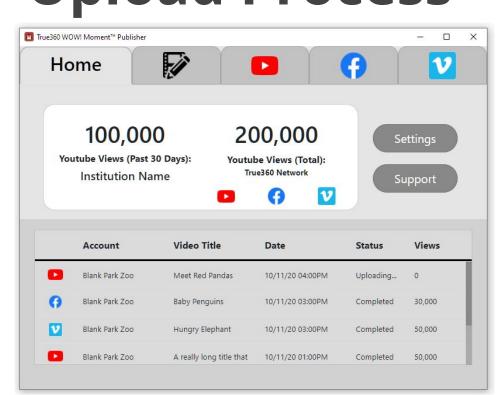
4. Second upload page which allows you to set unique data like a thumbnail, playlist, scheduled upload, and privacy.

Upload Process

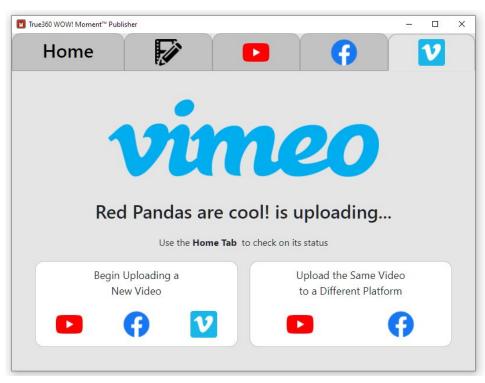
True360

Django API

Front-End Architecture Diagram



2. Home page which displays video data unique to institution

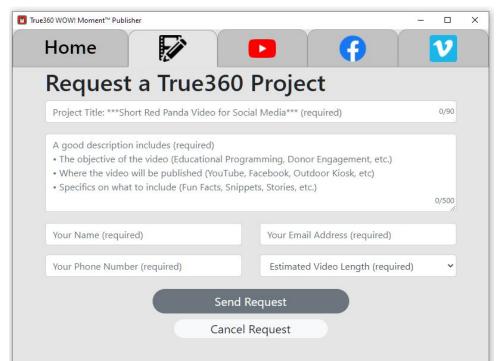


5. Upload finished! You can upload with the same data to other social media platforms or start a new upload

Back-End Architecture Diagram

ie360 WOW! Moment™ Publisher		:
Home		()
Publish t	o Vimeo	
Title(Required)		
Red Pandas are cool!		
Description		
WOW! Moments are	great too!	
Select Account	C:\Users\danny\Downloads\Red Pandas Te	est.mp4 Browse
Default 💙		

3. First upload page which allows you to set title, description, and choose which video to upload.



6. Request page that gives you the ability to request a custom video(s) from True360