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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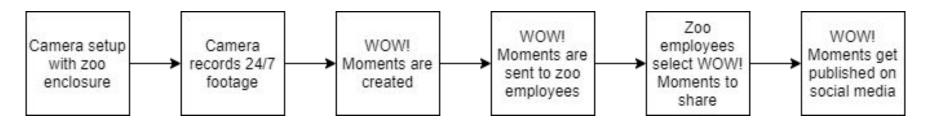
Faculty Advisor: Dr. Alexander Stoytchev

Introduction

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Overview of True360

- What is True360
 - Startup
 - WOW! Moments
- Lifecycle of the product:



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What is a WOW! Moment??



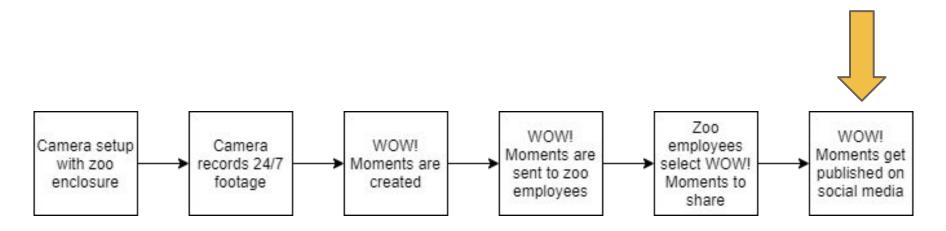
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Where we fit in

• Publishing WOW! Moments



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Functional Requirements

- Create a cross-platform application that allows for publishing of videos to selected platforms
- Create a centralized web server and database that contains publication data
- The app must contain the following features:
 - Bug Report / Contact Forms
 - User Documentation
 - Format videos and metadata based on platform

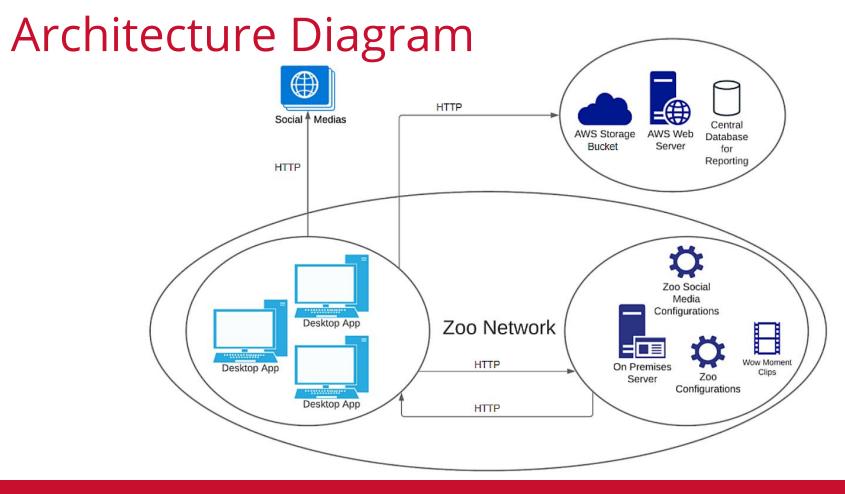
Non-Functional Requirements

- The product shall appear easy and simple to use
- The product shall perform swiftly for the user
- The product shall be usable by users with limited computer experience
- The product shall comply with legal regulations
- The product shall be built to last





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institutions

id	int
name	varchar(50)
address	varchar(70)
city	varchar(40)
state	varchar(30)
zipcode	int
phone_number	varchar(10)
email	varchar(50)
contact_name	varchar(40)
created_date	datetime

accounts		
client_id	int	
account_id	int	
account_type	varchar(15)	
account_name	varchar(50)	
number_of_video_uploads	int	
created_date	datetime	

Database Diagram

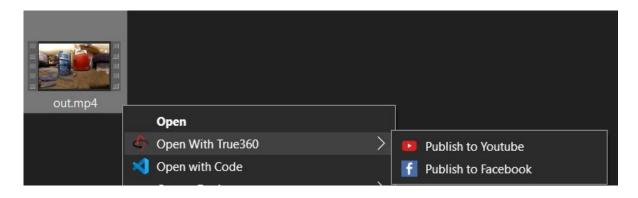
videos	
id	int
client_id	int
account_id	int
video_api_id	int
video_title	string
video_description	text
video_duration	float8
video_views	int
video_likes	int
video_dislikes	int
video_watch_rate	int
video_response	json

Technology

- OS/registry editing
- Network sharing
- Database management
- Installers and updaters
- Electron, Django

Right Click Feature (Windows & macOS)

- Client wanted UI to be OS native
- Ability to publish videos via right-click menu



MIMG_541	8eport.pdf Today at 7:41 AM	
tempD	Open	
True36	Open With	•
True36	Move to Trash	
	Move to trash	
	Get Info	
	Rename	
	Compress "IMG_5433.mp4"	
	Duplicate	
	Make Alias	
	Quick Look "IMG_5433.mp4"	
	Share	►
	Quick Actions	۲
	Copy "IMG_5433.mp4"	
	Import from iPhone or iPad	►
	Use Groups	
	Sort By	►
	Show View Options	
	Show Preview Options	
	Tags	
Library	1095	
	Scan with Avast	
	Publish WOW! Moment	
	Encode Selected Video Files	
	12)
	1 4	-

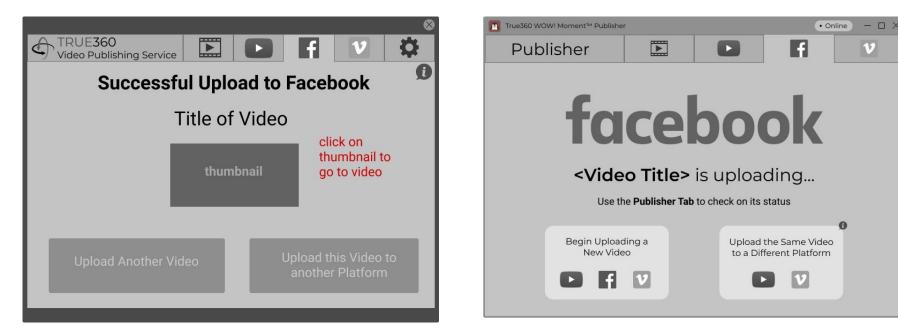
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Wireframe Concepts & Refinements

	True360 WOW! Moment™ Publisher • Online - □ ×
TRUE360 Video Publishing Service	Publisher 🗈 🕨 f
Upload to Facebook Reset Text Fields	Publish to Facebook
Video Title:*	Title (Required) Add a title for your video here
Description of Video:*	0/100
	Describe your video so people will know what it's about
Video File:* Browse >	Select Page
	<default page=""> (Default) V File Location from True360 Directory (Required) Browse ></default>
Next	Reset ••• Next

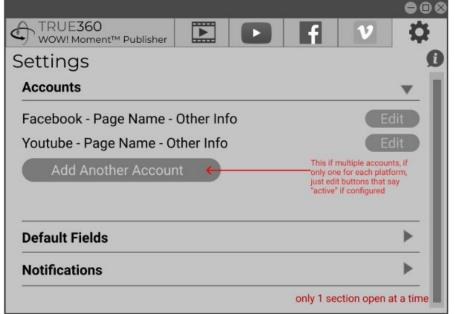
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Wireframe Concepts & Refinements



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Wireframe Concepts & Refinements



True360 WOW! Moment™ Publisher	- · · ·	• Online
	Settings	5
Accounts		
f < <account alias="" name=""></account>	<channel email=""></channel>	<channel password=""></channel>
Account Name Alias>	<channel email=""></channel>	<channel password=""></channel>
Default Fields		Add Publishing Account
Location Where is your facility located at?		
Category/Industry/Label What video category would you consider you	ır videos as?	
Notifications		

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Testing & Implementation



Research and Experimentation

- Right-click handlers on both Windows and Mac
- UI wireframe
- Social media API response information
- AWS cloud server options
- Video compression and metadata options

Development Testing

Unit Testing

- Social Media API commands
- Database insertions/deletion tests

Interface/Integration Testing

- Spectron will be used for front end
- SinonJS will be used for back end

Acceptance Testing

- Specific Acceptance Criteria
- Weekly Demos with Client

Project Plan

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Project Phases

- Environment Setup with Managed Source Control Process
- Basic Functionality Development
- Finalizing Advanced Functionality Development
- Complete Functionality with UI Development and Testing

Conclusion

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Technical Challenges

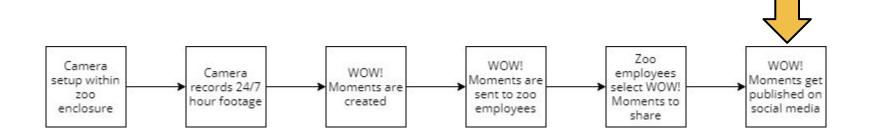
- 1. Meeting design specifications
- 2. Registry modification
- 3. macOS support
- 4. Learning the Django framework
- 5. Learning how to use Electron
- 6. HTML Framework (Angular, React)
- 7. Overcoming Senioritis (Procrastination)

Current Project Status

- Right Click Features
- Electron App Generation
- Amazon Web Server and Database
- Video API Upload
- User Interface
- Video Compression

Current Plans

- Complete the Desktop App
- Complete the Publishing Process



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