

Application for Sharing Interesting Zoo & Aquarium Videos to Social Media

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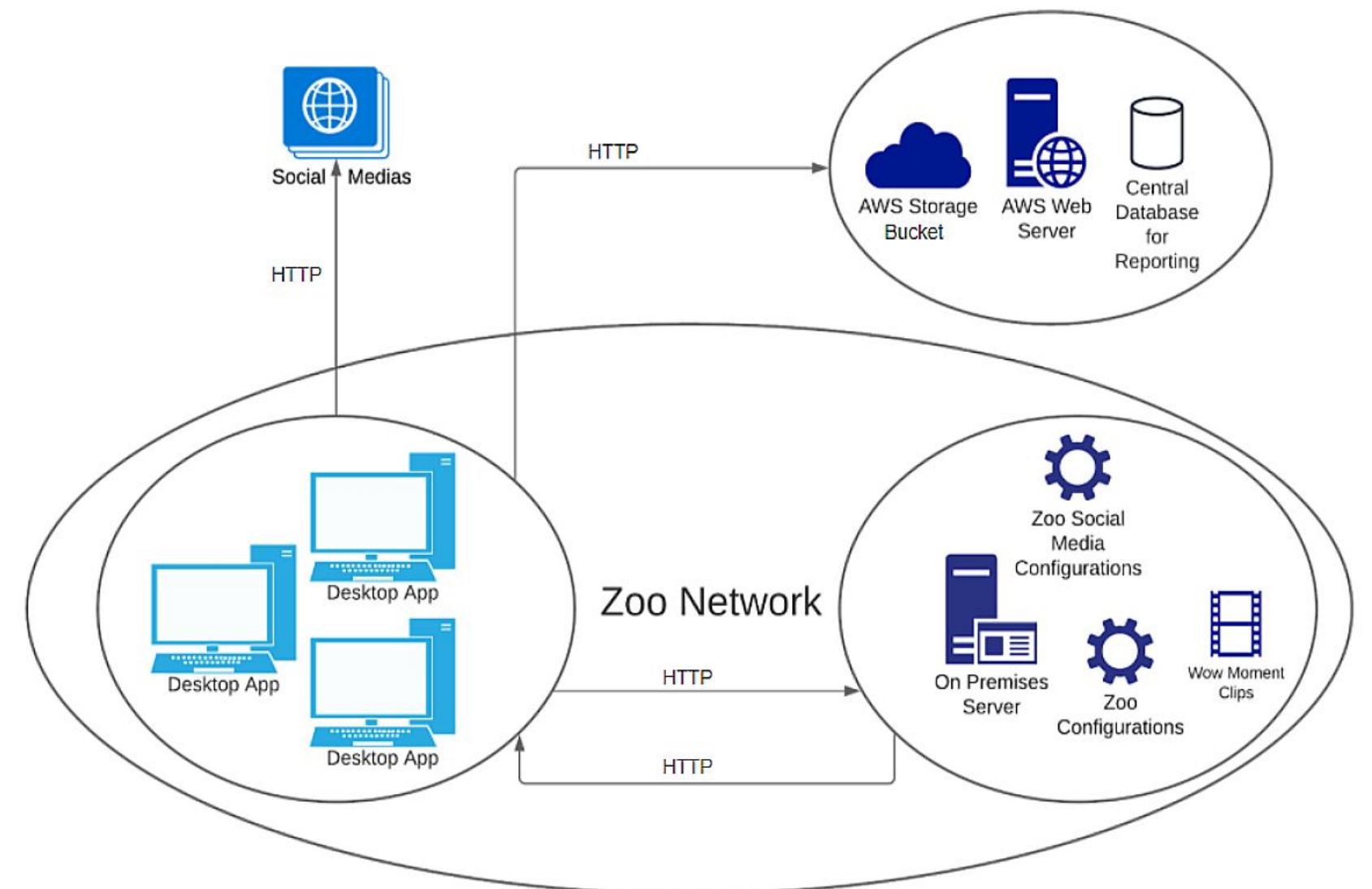
Faculty Advisor: Dr. Alexander Stoytchev **Client:** True360

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
<ul style="list-style-type: none"> • Cross-platform • Social media authentication • Video analytics • Video formatting based on platform. 	<ul style="list-style-type: none"> • Easy to use • Comply with social media TOS • Built to last and scalable/easily updated.



Overall Architecture Diagram

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

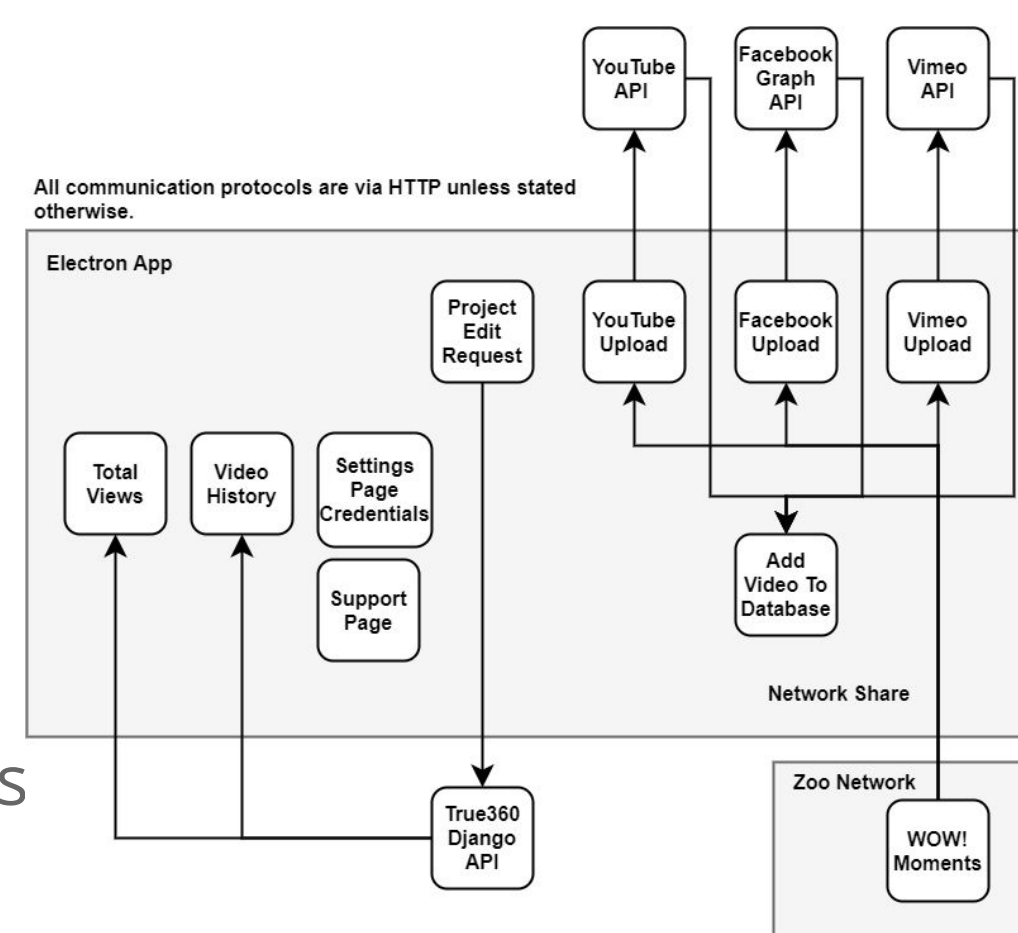
- Electron App
 - Jest Automated Unit Tests
 - Spectron Automated E2E Tests
- Django
 - Unittest Python Module

Standards

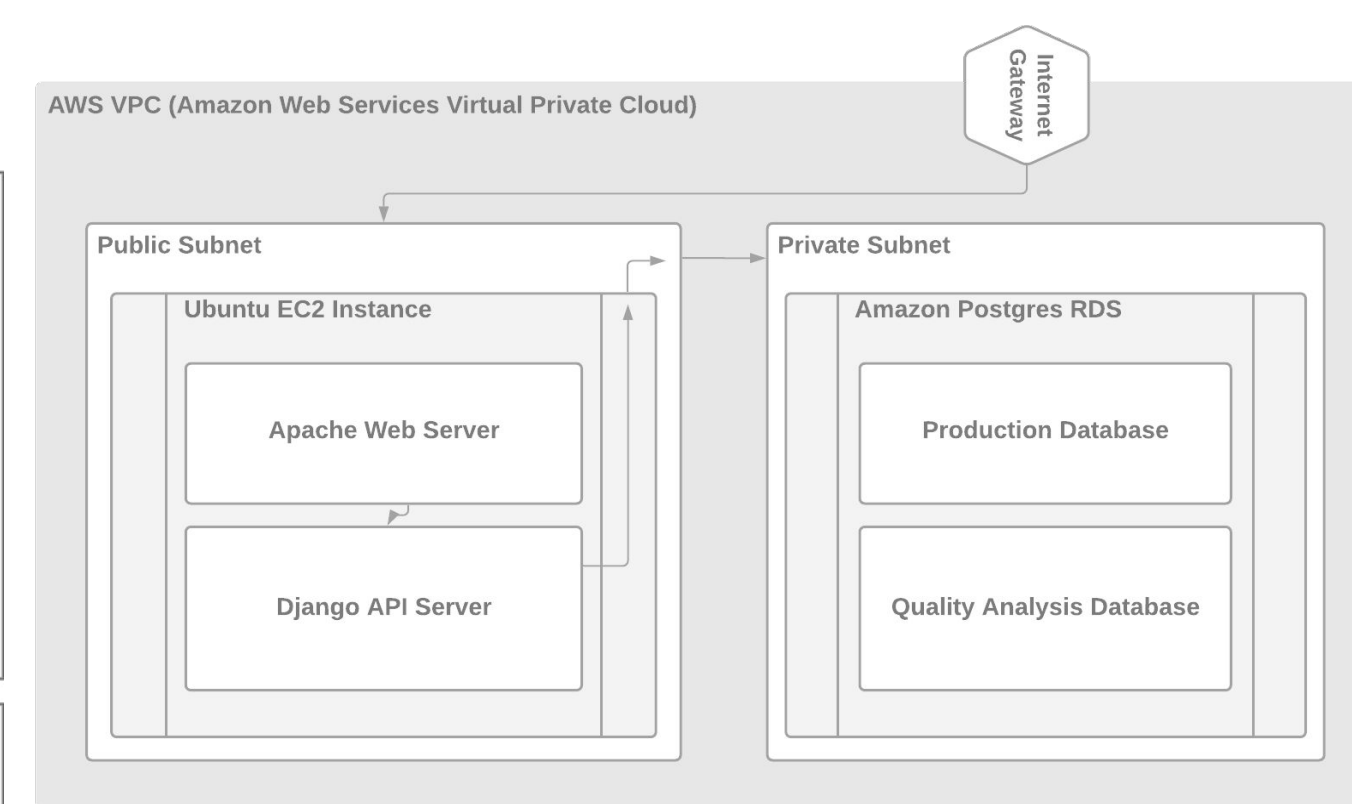
- **IEEE/ISO/IEC 24748-5-2017 - ISO/IEC/IEEE** International Standard - Systems and Software Engineering--Life Cycle Management--Part 5: Software Development Planning
- **IEEE/ISO/IEC 23026-2015 - ISO/IEC/IEEE** International Standard - Systems and software engineering - Engineering and management of 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
 - Follows True360 programming standards
- Unique API Keys for each Institution
 - Helps avoid hitting API Quotas

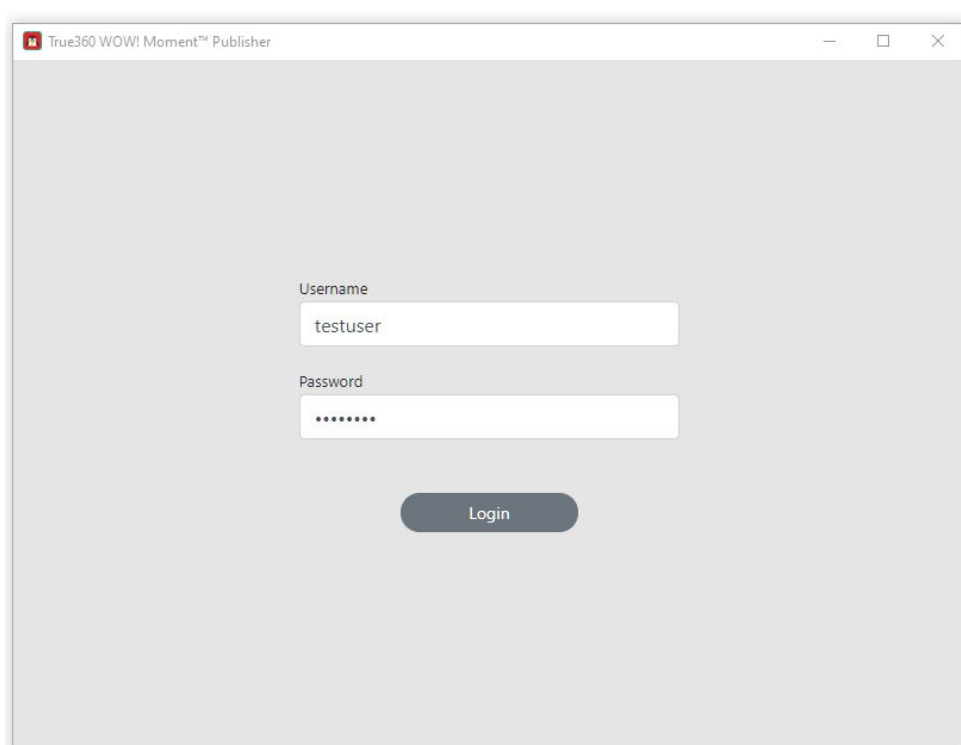


Front-End Architecture Diagram

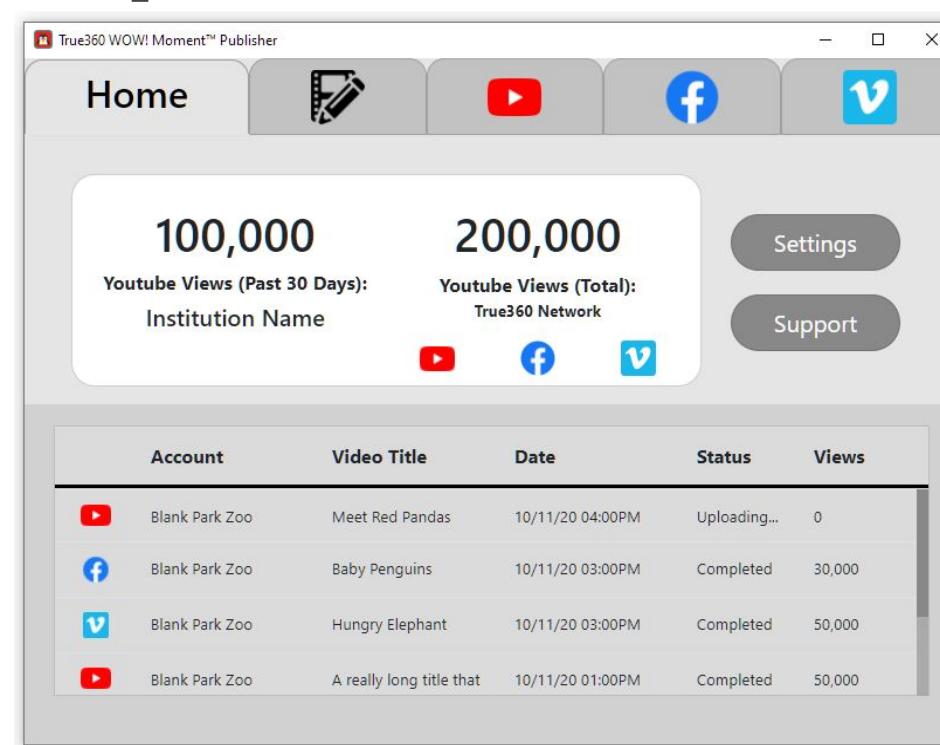


Back-End Architecture Diagram

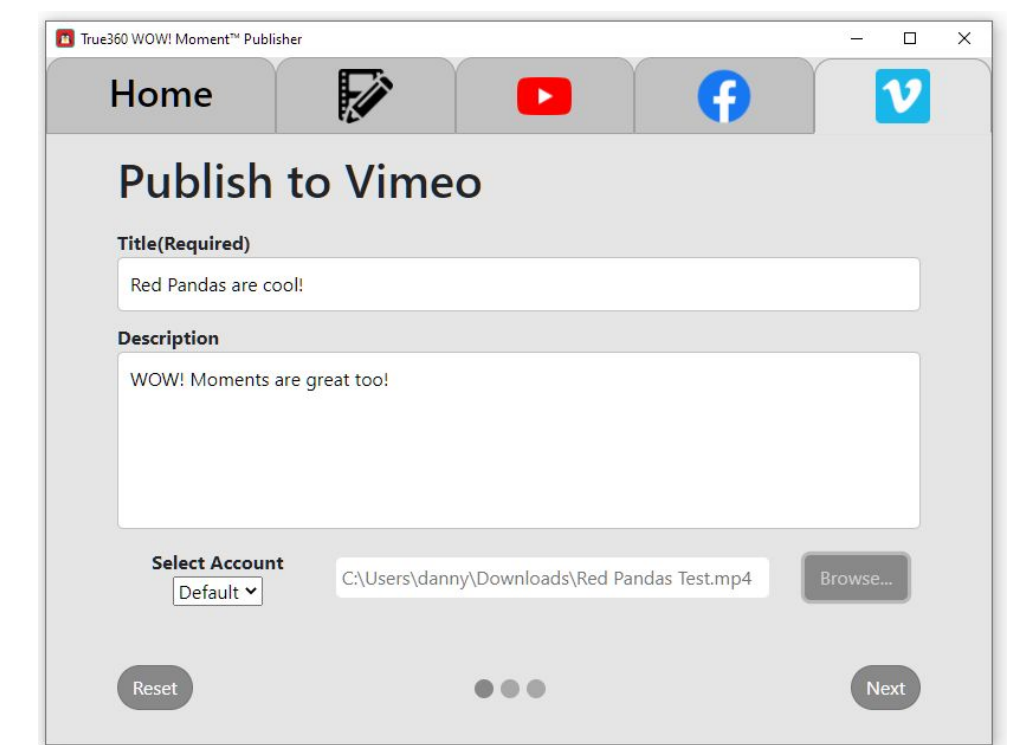
Upload Process



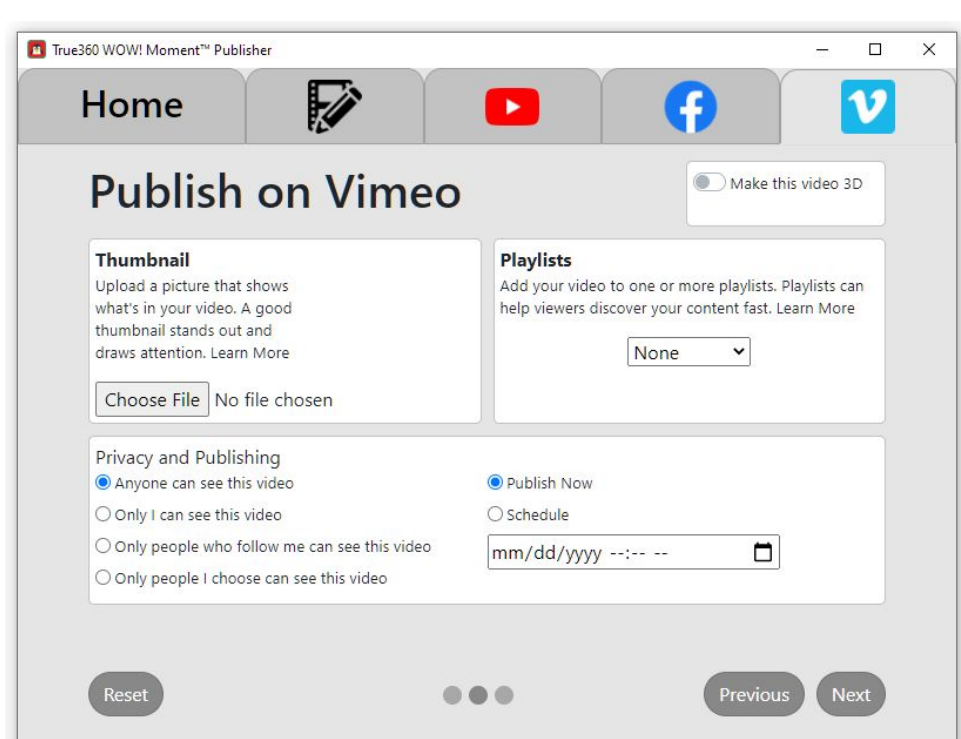
1. Login screen for individual institutions



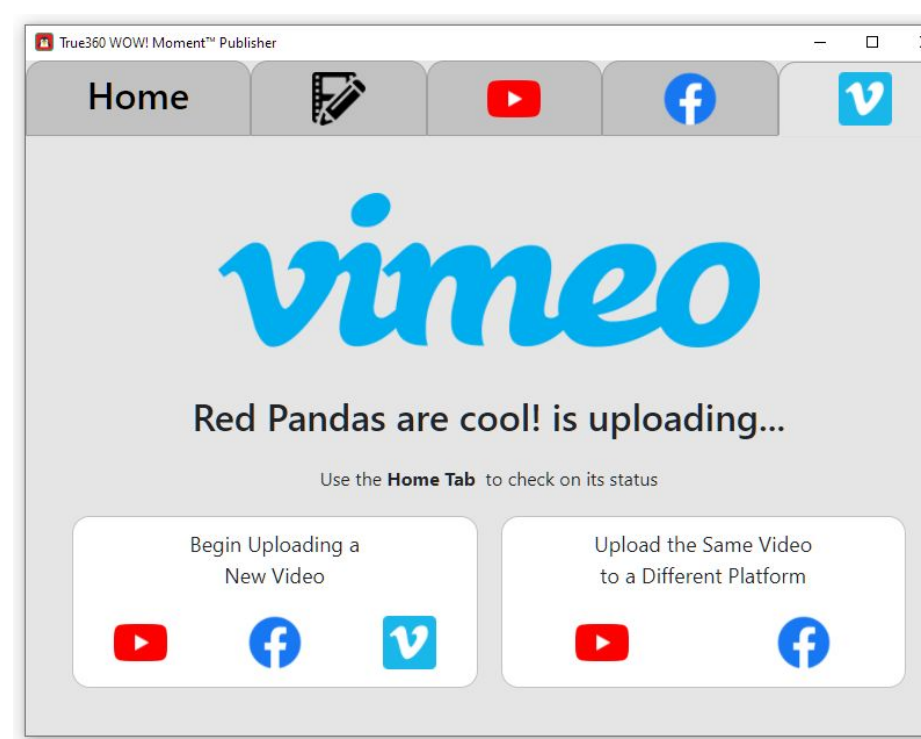
2. Home page which displays video data unique to institution



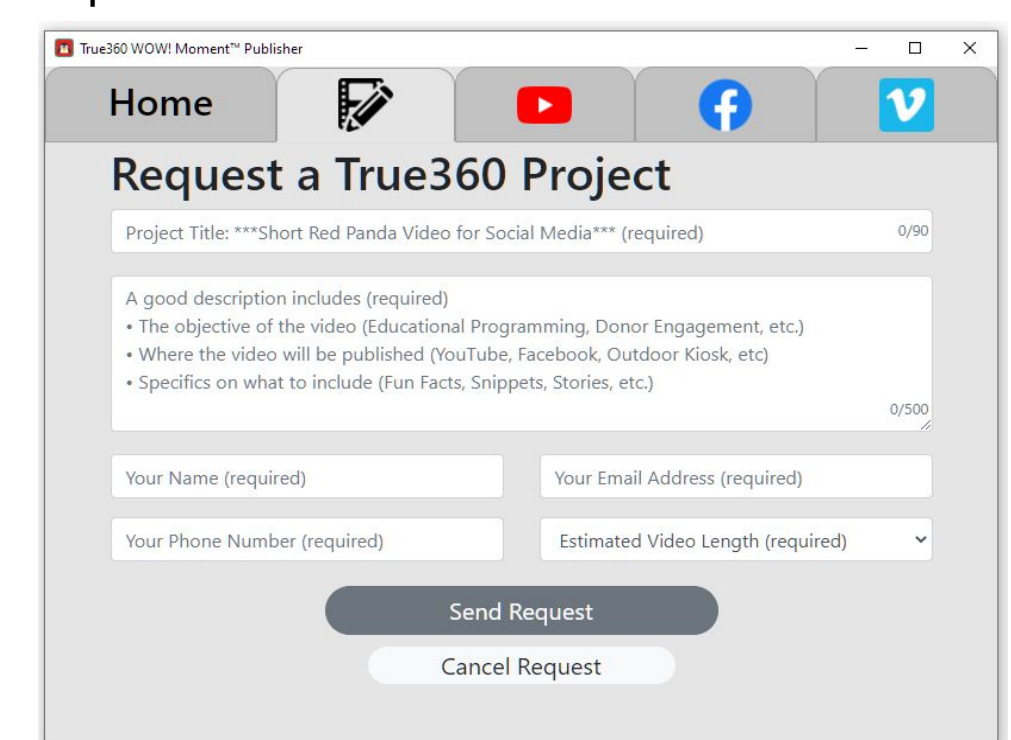
3. First upload page which allows you to set title, description, and choose which video to upload.



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



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



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