[ArtRank]

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Software Requirements Specification

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Revisions

Version	Primary Author(s)	Description of Version	Date Completed
1	Mike McCarthy, Co Giang, Daniel Lipeles, Senh Wang, Adonis Familia, Pat Beagan	This is the first draft of ArtRank.	02/16/15

Overall Description

Description

The product to be produced is a website which seeks to objectively rank the quality of art using head-to-head competition and an Elo rating system. On existing websites, art tends to be promoted by popularity rather than quality. In contrast, by using an Elo system, this website would avoid this problem. The Elo system rapidly promotes high performing submissions and provides a system of checks and balances which does not have an intense bias toward popularity and longevity.

This product will allow artists to upload content to be ranked. Users will create the rankings through head-to-head voting, which will populate the Elo rating system. We have two key target customers: up and coming artists who want an easy way to become recognized for the quality of their work, and art lovers looking for new, interesting artists who make quality work. From a customer's point of view, this will be different because it places no importance on an artist's ability to market themselves; all artists are judged solely by their work.

In order to enable users to understand and use this website, this project will include integrated help text throughout the UI, as well as an FAQ page that users can easily access. This will allow users to understand how to vote, comment, view the gallery, favorite artists, and upload artwork, etc.

Scope

ArtRank is a platform for artists to submit their content and have it judged and curated by the user base. We will not be providing any content other than user submissions, thus existing art will not be on the site unless submitted by its author. ArtRank is not meant to be an artist's portfolio, as such Users will not be able to see a gallery of an artist's work.

In terms of media storage we will primarily be dealing with Images, Audio, and Text, therefore the supported media types will be:

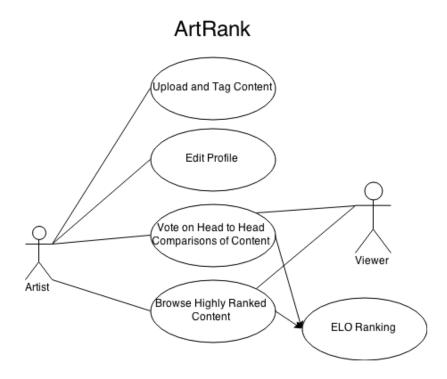
Media	Supported Formats				
Images	.jpg	.png	.gif	.tif	
Audio	.mp3	.flac	.alac		
Text	.txt	.pdf			

Although we promise video in the final release, we will not be storing video files in our server storage as they are large and typically difficult to host. We will, however, allow embedding by third party sites such as Youtube and Vimeo.

ArtRank is meant to be a web application run through a web browser. We will be using Node.js as a javascript runtime environment, upon which we will be using express.js for its templating and routing facilities. We will be developing for mobile web browsers first by using Twitter Bootstrap's responsive CSS. We will be using MongoDB as storage for metadata, but our actual media will be stored on an Amazon Web Services server.

We have to be cognizant of performance requirements, as they will have a huge influence on the site's user base. File uploads need to be quick and storage has to be reliable. Images must also render efficiently on the site to keep users interested in the material. We will be handling large amounts of user input and database queries concurrently, so we need to make sure that we host the app on a high availability server (e.g. AWS) which is able to process that number of requests.

Use Cases



The main contributors to the site would be artists looking to self-promote, and viewers looking for high quality art. Artists are crucial to the success of the site, as they are the ones creating all of the content for the site. Therefore, it is important that adding content be very easy to do. Viewers, as the goal audience of the site, will need to be able to access content they want to see quickly and in an organized manner if they are to keep using the site. Since voting is the defining aspect of the service, that is the most important use case.

Goal: Uploading and tagging a file

Goal	Uploading and tagging a file
Primary Actor	Artists looking to self-promote
Scope	ArtRank Site
Level	User
Precondition	User already has their internet browser running
Success Condition	File is uploaded
Failure Condition	File is not uploaded
Trigger	User visits the site's homepage
Success Scenario	The artist in question would visit the website and be greeted by the main page. He would then click on the tab at the top of the page which says log in. He would be directed to a new page, requesting a username, and password. Once the necessary information had been presented, the user would be directed to his profile page, which would list the user's name, description and relevant posts that the user has made recently. The user would then look for and click on the button on the page that says "Post." A drop down menu would appear, with sections asking for the file to be uploaded, the title for the file, and which tags to put on it. At least one tag must be chosen, to determine the genre which the file will be a part of. When the user is done supplying the proper information, he will press a button at the bottom of the screen marked "Submit." The information will disappear and be replaced by a simple loading animation. When the file is finished being uploaded, a congratulations screen will appear, with buttons to go back to either the home screen or the user's account. The user can then continue to use the site as normal.
Error Scenarios	When the user attempts to log in, they may input an incorrect username or password. The system would stay on the same screen, but inform the user that they had an invalid username/password combination. If there is an error while uploading the file, an error message will appear with the same buttons as the congratulation screen, allowing the user to go back to their page and try posting again.
	If an artist does not yet have an account, they will be unable to log in.

Goal: Voting on a file

Goal	Voting on a file
Primary Actor	Casual viewers
Scope	ArtRank Site
Level	User
Precondition	User already has their internet browser running
Success Condition	User submits a vote on the appropriate files
Failure Condition	User is not able to submit a vote on the appropriate files
Trigger	User visits the site's homepage
Success Scenario	The viewer in question would visit the website and be greeted by the main page. If they wish their voting record to be recorded, they would then go to the login page and sign in. She would then be given the option to scroll through files that are hosted on the page, or choose from a series of dropdowns at the top of the page. One drop down menu would be labelled vote, and will detail each genre of media on the site. After clicking one of these genre links, she would be brought to a page displaying two files side by side tagged similarly to the genre she chose to vote on. If the user liked one file more than the other, she would hit the button on the correct side of the page which says, "I prefer this." If she has no preference, she would hit the button in the middle of the page to pass. When the vote has been cast, details about each of the files would be shown under the files, along with a button that says next. If the user wishes to continue, they would be able to press that button to continue voting, otherwise they have completed their task of voting.
Error Scenarios	When the user attempts to log in, they may input an incorrect username or password. The system would stay on the same screen, but inform the user that they had an invalid username/password combination.

Feature List

Feature	Target
Submitting Content	Beta
Voting on Content	Beta
Elo ranking system	Beta
Comments on pieces of art	Beta
Tagging pieces of art	Beta
User choosing which tag they want to vote under	Beta
Supporting Image media	Beta
User Login	Final
User Profile / Gallery	Final
Support Video, Text, alternative types of media	Final
Ability for users to favorite artists	Final
Gamification (how to incentivize users to vote)	Stretch
Suggestion algorithm based on user data	Stretch
Ability to message/view profiles of other users?	Stretch
Ability for users to post ideas of what kind of media they'd like to see which artists can view for project ideas	Stretch

UI Prototype

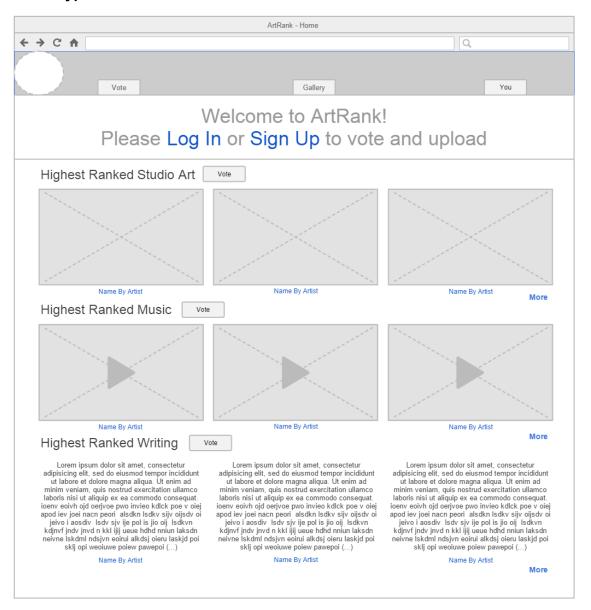


Figure A. Home Page
Displays the highest ranked content

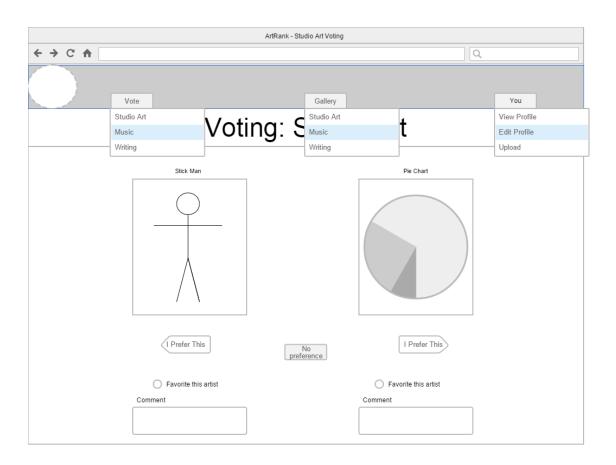


Figure B. Voting Screen

Users are presented with two pieces of art and choose the one they like better, which determines the rankings