Undergraduate Portfolio System

Project Proposal

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Table of Contents

|  |  |
| --- | --- |
| Executive Summary | page 5 |
| Statement of Problem | page 6 |
| Audiences  Students  Faculty  Other Audiences  Administration / Marketing  Prospective Students  Parents  Potential Employers | page 7 |
| Project Objectives | page 12 |
| Solution Overview  Proposed Solution  In-Scope  Out of Scope  Alternative Solutions  Technical Approach  Server side  Client Side  Source Control Management  Coding Standards  Design Approach | page 13 |
| Definitions  Users  Groups of Users  Student Work  User Profile  Collections of Student Work | page 15 |
| Features  User Features  All Features | page 29 |
| Designs  Site Map  User Flow Charts  Wireframes  Storyboards  Class Diagram  Database Schema | page 33 |

Document To Do

Audiences

* Add Alumni

Technical Approach

* Coding Standards

Solution Overview

* Proposed solution
* Add more details to in scope and convert to paragraph
* Alternative solutions
* Design approach

Designs

* Site map
* User flow charts
* Wireframes
* Storyboards
* Class diagram
* Database schema

Executive Summary

The University of Maine does not have an online portfolio system for undergraduate students. Academic work exists only at the classroom level and students lack the tools and opportunities to share their work with a larger audience. Student work originates from a variety of sources including multiple classes, research labs, personal projects, along with various others. Students also lack tools for organizing and archiving these works.

The proposed project seeks to address these issues and more by developing a system for students to organize, share, and publish their academic work. The system will support the discovery and sharing of excellent student work by multiple audiences including faculty, alumni, and potential employers. It will also provide evaluation tools for students to solicit feedback from others.

The system will be implemented as a website accessible to all undergraduate students, faculty, and other groups. The remainder of this document outlines the specific reasons, approach, and plan for developing the proposed project.

Statement of Problem

Undergraduate students at the University of Maine currently lack tools for organizing and sharing their academic work during their time spent at the university with diverse audiences. While mechanisms for disseminating work exist at the graduate and faculty levels (such as academic journals and conferences), undergraduate work typically is not seen outside the classroom. Students lack the tools to fully demonstrate their academic excellence and achievement to potential employers, graduate schools, and many others.

Although student academic experiences are clearly defined through concrete programs of study, the associated academic work is fragmented and disordered. The academic development of the student is often lost and specific projects forgotten. Faculty and departments are at a disadvantage when exemplary classroom and student work is lost that could be used for future classes and exciting prospective students.

Audiences

This section describes the various audiences and audience needs for a portfolio system. The primary audience is undergraduate students, followed by faculty as a secondary audience. Tertiary audiences include the administration, prospective students, parents of students, potential employers, and alumni, among others.

Undergraduate Students

Limited discovery paths exist for students to discover and demonstrate their own work. Students are left without a representation of their academic performance because they lack the tools to present and showcase their work to others. Finding people with similar interests is also difficult, especially in other majors and colleges; however, these works can serve as inspiration and motivation for academic excellence and potential collaboration. Research into past work, for example, grouped by specific class work, is impossible. Finally, without dissemination avenues, students often find it difficult to demonstrate their work to a wide & diverse audience.

Students currently have limited to no feedback on their academic work except classroom-based feedback. As a consequence, students do not have the tools for evaluating quality work or improving their own work beyond limited inspection.

Existing academic work is neither in one place nor organized. As a consequence, student work is fragmented according to individual classroom work and ill representative of the entire academic experience. Students do not have a way of assessing progress over their 4 years because older work is often forgotten or lost.

With the existing infrastructure, it is difficult for students to share and collaborate with peers & faculty. Sharing project work requires students to maintain multiple versions of work through email, implement custom team-based software solutions, or implement some other custom solution. Discovering potential collaborators (such as existing peer/faculty research opportunities or interested project partners) is often difficult and limited to spontaneously discovered opportunities or opportunities & peers within the major. Connecting with peers for project work because of varying schedules and a multitude of device platforms also further compounds the issue.

Faculty

Existing student feedback on work does not extend beyond the classroom or integrate well with external systems. While some feedback tools currently exist, expanding the scope of how work is viewed and the available feedback options will enhance learning and understanding. For example, grading and feedback tends to be limited to instructor responses and does not include very much peer feedback. Viewing student work outside the classroom also provides faculty with an opportunity to recognize and provide different feedback than rubric-based assessment.

Currently, communicating student work is mainly accomplished through hearsay within a department. Faculty are often required to demonstrate to their department, prospective students, a new class of students, or other sources excellence within their major or class. Sharing this work can be difficult, as there are no tools or mechanisms in place for maintaining and providing a consistent view of student work.

The lack of available tools makes faculty networking and collaboration with students difficult. Finding diverse students to work in a lab, especially students outside the major, is hard, especially without clear work to view. Similarly, finding students for project collaboration outside of students met through classes is hard. Helping connect students to resources (such as potential employers) can also be difficult, as tools for recommending and supporting student work do not exist.

It is impossible for faculty to find exceptional student work without archiving class work on their own or networking with other class archivists. However, discovery of this work is difficult and archival and organization is almost non-existent. Organizing, collecting, and showcasing excellent and representative work would strengthen a college's/department's/class's image to various audiences as well as provide a roadmap of a department's transition through the years. A tool to track and view the development of a student throughout their time at the university would be of great use to faculty.

Other Audiences

Administration / Marketing

Administration

The primary need concerning the administration audience is to find somebody with special skills (be able to take some beautiful photographs, be able to design an advertisement for an upcoming event...).

Presently, people from the administration are forced to send a general email to their different contacts to find the right person. Our system must therefore overcome this problem by proposing an efficient research tool on specific skills. The results of this research should be presented in a way that would allow for comparison of the works of various "candidates". Finally, a system of "status" to say if this person is available to do some volunteer work or if he/she wants to be paid for that has to be implemented. At an implementation level a filter among the search criteria could materialize this function. Obviously, it should be possible to directly contact this selected student if necessary.

Marketing

The administration always wants UMO to look good. A system of show off repository should be implemented to be able to pick images or stories of good students. These media outlets could potentially be used for marketing events and promotion. Finally, the administration could see which departments are actually doing good work.

Prospective Students

As a tertiary audience, prospective students also have many needs that the Portfolio System could facilitate. Presently, prospective students have no window into the work being produced by current students of any level. Access to the Portfolio System would allow these prospective students to see exactly what gets produced in many courses offered within their program of study. This would give them the ability to more accurately assess their interest in the program and understand what paths are available to them. Also, no current system is in place that allows for the viewing of work done by faculty. Opening up this channel would allow for prospective students to not only view this work, but also provide a convenient location to contact a faculty member that specializes in their unique interests. This combination of both student and faculty work would allow prospective students to see the major's/department's community as a whole and start to visualize themselves within it. Lastly, being able to see the growth of a current student through the entirety of a program would give a prospective student insight into potential careers upon graduation. Knowledge of the future is one of the primary decisions behind prospective students ultimately choosing a program to follow, thus the Portfolio System should be able to accommodate this need.

Parents of Students

Parents of current and prospective students comprise a peripheral yet important audience for the portfolio system. Currently their access to student work is largely limited to what their child might choose to share with them or what they can glean from various 'featured student' columns throughout the university and department websites.

For parents of current students, the portfolio system will provide access to their child’s work while they are away at school. They can view other students' work as well, which will allow them to easily gauge how their child is performing compared with other students in their department or even university-wide. Parents will also be able to track their child's progress over time, and have a better sense of their ongoing development. The portfolio system provides parents an easy way to share their child's work with others for several reasons, from simply showing off as a proud parent to showing work to potential employers or financial assistance sources (i.e. scholarship funds, etc.)

Parents of prospective students would benefit greatly from the portfolio system by having access to a university-wide repository of student work that they could browse. With this tool they could investigate different majors and departments that would help them and their child make informed decisions about where and what they would like to study, and gain a clear idea of the quality of the education and department that their child might enter into.

Potential Employers

Any excellent academic work that might help employers find students (potential employees) is difficult to access at best. This means that it is hard for employers to compare students based on their actual work. The employer has limited ability to see the level of student motivation and a complete list of their activities. It is also difficult for employers to get a sense of the university community, the level of academic commitment of students on a particular campus, and the quality of academic work that is produced from the undergraduate community. This leads to the difficulty of comparing students from university to university, and how their work compares to students at different universities.

While the job market affects what courses and information are important in a given academic path, the process is often delayed. This causes many potential employees to lack the skills that their field is using or is transitioning too. The lack of direct involvement of employers in informing academic paths means that students are not as focused on learning important information in their field as they could be.

It is difficult for employers to view student skills that might apply in the job market. Without seeing these specific skills it can be hard for those employers to match students to the jobs that would fit them the best.

Alumni

Alumni are another small but important audience for the portfolio system. Their usage falls in two general categories: previous students that have used the portfolio system and wish to have access to their undergraduate work after graduation, and alumni that can provide feedback for current undergraduate students. The two groups are not mutually exclusive and presumably many alumni would fall in both.

For graduated students who have used the portfolio system during their UMaine career, the system gives them a useful tool for showing their work to potential employers or graduate programs. Not only can it function to display an alumnus’ best or featured work, it can also show the development of the student through their undergraduate career.

Alumni can be invaluable sources of feedback for undergraduate work. Having graduated from a specific department and area of study, they represent an ideal target for students in this regard. They will have a strong knowledge of the subject matter, an understanding of the demands and expectations of the department/class/field, and in many cases they will also have professional experience coming directly from their own related studies.

Project Objectives

In order to address the primary needs of all of the audiences, this project will focus on accomplishing the following objectives:

• Provide access to student academic work

• Network students with other audiences

• Facilitate communities around academic work

Providing access to student academic work entails facilitating the discovery of excellent student work for all audiences. In addition, students need to be able to organize and archive their own work, allowing them to track their progress as well as show exemplary work to the general public. Faculty also need tools to track students and showcase excellent student work such as for a specific class or department.

Networking students with other audiences means providing social tools for connecting users to students. Networking may occur in any of a multitude of directions such as students using their portfolio in their resumes for potential jobs, potential employers finding excellent students, or peers finding potential collaborators, etc.

The objective of facilitating communities around academic work is to leverage online tools for strengthening the academic experience. Because student work is on-going, students need tools for sharing work with peers and soliciting specific feedback on works in progress. Contributing and exploring works within specific communities also enhances learning and academic excellence.

Solution Overview

Proposed Solution

We propose the construction of the Undergraduate Portfolio System, a web application containing the following components:

* An undergraduate student workspace in which they can upload, edit, display and share their academic and personal work online with peers, faculty, administration, parents, potential students, alumni, and the general public.
* A publicly viewable catalogue of undergraduate student work that can be browsed and searched based on several criteria including: subject/type of work, department, student profiles, user-created groups, special interests and more.
* A robust networking system that enables students to solicit and receive feedback on their work, fosters collaboration between students, gives faculty a utility to help organize and review classroom and field-based student work, and connects students to other students, faculty, advisors and others via flexible user groups, related work and peer profiles, direct messages, ‘following’, comments, and evaluation systems.

In Scope

* Undergraduate student portfolio system, as defined above
* System integration with other tools like classroom project tools
* Student authentication linked with MaineStreet student account
* Portfolio System documentation

Out of Scope

The proposed project will not be providing portfolio functionality for graduate, faculty, or alumni work. Sophisticated collaboration tools such as managing project files like Dropbox, planning tools, and other group-based collaboration that is outside of basic sharing for feedback and project viewing will not be included.

Alternative Solutions

The possibility of the University of Maine adopting a 3rd party electronic portfolio system such as Behance, Carbonmade or ePortfolio was considered. However, the extensive customization that would be necessary to fully address the specific needs of the University of Maine community are not feasible, leaving any such solution a compromise at best. Additionally, developing in-house represents a substantial cost savings over the purchase or subscription to a 3rd party system.

Technical Approach

The technical decisions were made primarily out of convenience to leverage existing skills and implementations in other projects. Distinct libraries were chosen instead of customizing a content management system to minimize extraneous functionality and ease adoption by new developers. As well, additional libraries can be added to the system with relative ease.

Server Side

The backend will be developed using a LAMP setup <http://en.wikipedia.org/wiki/LAMP_(software_bundle)>. Page requests will be managed by the library Slim <http://www.slimframework.com/> and database access will use the active records implementation provided by Paris <https://github.com/j4mie/paris>. Twig will be used for rendering html templates <http://twig.sensiolabs.org/>.

Client Side

Twitter bootstrap will be used to ease html structures and JQuery will be used for DOM manipulation where necessary. Other JavaScript frameworks will be explored as needed such as underscore.js and JQueryUI.

Source Control Management

To manage code between developers git will be used to mange the application code. For tutorials see <http://sixrevisions.com/resources/git-tutorials-beginners/>.

Coding Standards

Design Approach

Global Terms & Definitions

Users

* (Anonymous) Viewer – Non-registered person who browses work and students
* Registered Member – A registered user who can participate in groups (e.g. Alumni, Parent, graduate student)
* Student – An undergraduate UMaine student
* Faculty – A UMaine instructor
* Group – a collection of people for a common purpose (e.g. feedback, collaboration, viewing work, etc.)

Work

* Media Item – An instantiation of content of a specific type
* Media Set – A collection of media items of the same type
* Project – A collection of media with context
* Portfolio – An individual student’s collection of projects. A student may have multiple portfolios (e.g. job, academic, photography)

Feedback

* Comment – A textual response to a work
* Rating – A numerical evaluation of a project
* Assessment – An evaluation of a project in response to a specific solicitation (form), consisting of comments and ratings

Users

Users are registered and non-registered individuals who interact with the portfolio system. User types include anonymous, member, undergraduate student, and faculty. In addition to their own specific features, members have all of the same features as an anonymous user and students and faculty have all of the same features as a member. For detailed features associated with users, see the Features > User Features section.

Anonymous

Member

Student(Undergraduate)

Faculty

Anonymous

Anonymous users are users who are not logged into the system, i.e. the general public viewing the website.

* Publically accessible projects, portfolios and profiles are available for browsing.

Member

Members are generic, logged in registered users of the portfolio system. Any person from any audience can become a member, such as an alumni, graduate student, potential employer, and parent.

* All members may participate in groups (for viewing, assessment and feedback) but only undergraduate students may post work to the system.

Student

A student user is a specialized type of registered user. A student user is a registered member who is also an undergraduate student at the University of Maine. Any other student type (such as a graduate student) cannot become a student user. Students are the primary user group.

* The primary function of students is to manage their portfolio and projects.

Faculty

A faculty user is another specialized type of registered user. A faculty user refers to a professor or instructor at the University of Maine.

Projects

A project is any work created within a specific context. At the most basic level, a single student project is a collection of media (links, audio, images, video, text, interactive apps, and others) and contextual information describing the work. Examples of work include class work, personal projects, photography, employment projects, research, extracurricular work, and so forth.

Project (Student work)

Media Set

Media

Media

Media

Context

Media

Media are the containers for pieces of a student work. Users create media by providing the content for a specific media type, for example, by uploading a file or providing a link to other media on the web (such as youtube, vimeo, Flickr, etc.). A single media item is a container for a specific type of content. It may be displayed by itself or multiple medias of the same type may be grouped into a media set.

Media Item

A media item is a container for a specific type of content. Usually a media item is tied to a single file, a link, or some other data provided by the user. Media items also include meta information about the content type, which may include specific technical information like encoding format or more general information such as title and location. Media items are also visual containers for content and display properties and templates are specified for each media item. Example media items include:

* Video
* Image
* Text
* Link
* Audio
* Interactive Widget
* Download file link

Media Set

A media set is a collection of media items of the same type. Example media sets include:

* Image Gallery – a collection of images
* Playlist – A collection of audio files
* Video Gallery – A collection of videos

Contextual Information

Because student works come from a variety of sources, there is a lot of rich information than can be extracted about the time, location, event (if applicable), description, type of work, associated groups, collaborators, completion status, and self evaluation. Contextual information that will be collected includes:

* Completion Status (Work in progress, complete)
* Type of work
  + Class Work
    - Capstone/Thesis Details
      * Defense Date, is Honors
    - Dept. Name & number
    - Instructor
  + Personal Project
* Date started / finished (semester)
* Description of work (goals, assignment, background information, etc.)
* Other collaborators
* Category(s) work belongs to
* Assessment
* Tags

Published Projects

When work is designated as complete, it may be viewed publically. When work is public, it is tagged with the following information:

* Number of views
* Ratings
* Comments

Feedback

Feedback functions in two distinct ways:

First, for work in progress, students can solicit other users to provide evaluation for a specific work. Students create custom questions and allow other users to view and evaluate their work using the questions. Responses are available to the owner.

For completed work, owners can solicit feedback in the form of assessment criteria that registered members can respond to. The owner of the work has permissions to turn off or delete assessments and evaluation for their project if they so choose.

# Portfolio

A portfolio is an individual student’s grouping of one or more of their own projects together for display. A student may have any number of portfolios, arranged for any reason: type of work, subject, academic, personal, for potential employer, etc. Alternately, a student may choose to have just one that holds all of their work.

* Metadata contains:
  + Title
  + Creator
  + Description
  + Tags – at least one
  + Department (optional)
    - Include message “If left blank this portfolio will not appear under Department search”
  + Categories (optional)

User Profile

Profiles provide contextual information about a single individual by describing who she is, academic interests, and other defining information. The system can use this information to strengthen search results, suggest similar related people and work, and help contextualize users.

\*\* Basic profile information for each registered user type are provided below. Version-specific information can be viewed in V1 document.\*\*

All members have the same details as an undefined member, plus their own specific details.

Member

* Name
* Interests
* Place of origin (where they’re from)
* Description
* Picture
* Type of user (faculty, student, or other)

Student

* Year > freshman-senior
* Department
* Major/minor

Faculty

* Department
* Classes Taught

Bookmarking and ‘Following’ Work

There are two user designations of collecting work: bookmarking and ‘following’.

Bookmarked work is collected together by any registered member, and is available to view from the member’s profile page. (Also can be thought of as ‘starred’ work). Work can be bookmarked at several different levels, from individual projects, to portfolios, to public galleries, groups, categories, portfolios, etc. Bookmarking work does not endow it with any special functionality beyond allowing it to be easily accessed by the member that bookmarked it.

‘Followed’ work is similar, but tied to the system’s notification system. If the ‘followed’ work is edited, upgraded to complete or deleted, the member will receive a notification.

Current Features

User Features

This section describes what features are available to which audiences. Note that students, faculty, and members all have access to anonymous features and students and faculty have access to member features.

Anonymous User Features

* Browse student work in collections
* View student profiles
* Search for students, work
* Register account

Member Features

In V1 of the portfolio system, there would only one type of member.

* Create and edit profile
* Discover/browse/view work and profiles
* Answer personal assessments
* Bookmark work and profiles
* Delete account & data

**Student Features**

* Upload/edit/publish work
* Organize/contextualize and archive work
* Share work and work-in-progress
* Solicit personal assessments
* Submit projects to faculty-created class groups
* Provide and receive class assessments based on faculty criteria

**Faculty Features**

* Place students into a class group
* Create “assignment”
* Create assessment criteria for work in “assignments”
* Control who can see the assessments within their class(es)
* View, sort and summarize assessments from assignments

Detailed features

This section organizes system features into common feature groups and further explains what the feature is.

**Account**

1. Register new account

Creates a new member

1. Delete account and data

Removes all data and account information

1. Manage notification settings

Set notification methods (email, text) and notification types to receive

**Profile**

Profiles are available to any logged in user, V1 of the Portfolio system will only have one account/profile type.

1. Update profile information

Change profile information such as description, interests, etc.

1. View profile

View any user’s profile information

**Student Work**

* Create new work
* Organize and contextualize work into portfolios
* Designate work as in-progress or complete
* Designate work as public or private
* Add questions about the work that the user specifies (personal assessments) – **See next section (Assessment)**
* View responses to personal assessment questions
* View responses to class assessment questions
* View own class assessments in relation to whole class (summarize/rank)

**Assessment (feedback on user work):**

* Within the project, the user (browser) would be able to message the owner (project creator) directly through email
* To get assessments (comments and ratings) on a project, the owner would be required either to select a question about their project that they would like answered or a topic that they would like the assessment of their project to be based on. The question might be something along the lines of “how might I improve \*this\* about my project?” A topic might be something like “originality”, “creativity”, “usefulness”, etc. This would be used to get constructive feedback, rather than general comments like “this is a good project.”
  + - In this description “owner” refers to the owner of the project that the questions will be displayed under
  + There would be a pre-generated list of questions and topics that the owner could choose from, or they could make their own question or topic. The owner could also disable comments for their project entirely.
  + The questions could be contextualized by the owner, allowing the question to be linked to a specific part of the project (a picture, certain pages of a paper, a section of a video, etc)
  + Comments would have a required number of characters to be posted
  + The owner would be able to specify whether they want comments, a rating (a scale of 1-10), or both as a response to the field they have selected. For most questions, it is likely that only a comment field would be requested, and the ratings would be used more for the assessment topics
  + The rating of a particular topic (or question, if appropriate) would be viewable to everyone. Comments would be only viewable to the owner, but they could choose to publish a comment or comment thread (in the context of its topic or question).
  + Upon reaching their project, the owner would be able to “view assessments” of that project, which would initialize a window overlayed in front of the project. The window would display a list of all questions/topics used for assessment, and any cumulative ratings. Clicking on a question would provide a drop-down list of all comments and any ratings associated with the comments.
  + Assessments would be either public (any member of the portfolio system can complete them) or semi-private (only members of a certain class, department, etc can complete them or only faculty members can complete them)
* There should also be a method of reviewing work that allows direct interaction with the project, for example: editing a paper for grammar and showing the marks that have been made

**Browsing/ Discovering Work**

Work is accessed in a variety of ways, to fit a broad range of browsing needs:

1. A search bar can be found on every page, that searches for keywords, names, categories, project titles, departments, classes, and tags.
2. The ‘Discover’ page has a left sidebar that allows for browsing though academics (departments, classes), term, categories and tags.
3. ‘Recommended’ content is generated based on user’s activity, returning projects and profiles with related content as the user navigates through.
   1. An advanced version of this might actually build up a browsing profile of a user over time, to deliver highly customized content.

Ultimately, all three navigation models are intended to work together, with each available at any given time and at all stages within the site structure.

**Interacting with Work** – Features available to registered members only, except where noted.

* Profiles:
  + View (available to anyone)
  + Send message (through email)
  + Bookmark profile
  + Share permalink
* Projects:
  + View (available to anyone)
  + Provide personal assessment (based on owner’s provided criteria)
  + Message owner (through email)
  + Bookmark within the site
  + Share
    - Permalink
* “Like” or otherwise link to social media

**Bookmarking**

* Sort by type:
  + profile
  + project
  + portfolio
* be able to unbookmark a page

**Faculty Features / Class Project & Assessment tools**

(Student features in blue)

* Create a class.
  + Specify:
    - the name
    - description
    - prefix and course number
* Add students to the class
  + Manually add students to the system
  + Can we tie in with class rosters in Maine Street?
  + Student receives a notification via email
  + Student UI:
    - Search for and request a class
    - Validate or reject a class invitation
    - Quit/Drop a class
* Create assignment
  + On class page, faculty creates assignment
  + The following would be controlled through a “manage classes” page and a “manage assessments” page that faculty members would have access to:
    - Each assignment would have a description of the assignment, and allow students to create projects through a link in the assignment
    - Once projects had been created through that link, they would be categorized into the class and the assignment within that class.
  + Create DUE DATE – timeframe, can close entries
  + Faculty would have pre-defined messages that would be sent to all students in a “class” or “assignment”, such as “You have a new assignment to complete” or “your projects in assignment 1 are ready to be assessed.”
  + Student receives a notification via email
* Create assessment criteria
  + Once assignment is created, faculty can create assessment criteria.
    - 2 types of assessment questions:
      * Rating from 1 to 10
      * Textbox for comments
  + Create DUE DATE – timeframe, can close entries
  + Faculty would have the option to control when assessments are available.
  + Faculty can define the number of assessments that each student would have to complete, this would require an algorithm that balances the projects so that they all receive close to the same number of assessments
  + Students would not be able to change the assessment criteria or the class denomination when creating a project through this avenue
  + Student receives a notification via email
* Assessment Page - Aggregate the result somewhere
  + Stats:
    - Who has completed/not completed…. X out of Y completed
  + Aggregated results of each assessment item
  + Ratings/sorting…
  + Option to make class rankings public to the entire class
    - Student is able to see the assessment on your own project, and see overall class summary for ranking/comparison.
* Each student will have a “my classes” page where they can view all their classes, and in turn go to specific class pages (which would show any assignments, any notifications about that class, and all the members of the class.

**Feedback about the Portfolio System:**

* The portfolio system should have some form of “Contact Us” section that might contain a forum and a way to message the development team
* Within the “Contact Us” page, there would be an “About” section that would describe the portfolio system (and ASAP?)

Site Map

**Anonymous User Sitemap**

See File **Anonymous\_Sitemap.jpg** in Portfolio Version 1, Sitemap folder

**Member Sitemap**

See File **Member\_Sitemap.jpg** in Portfolio Version 1, Sitemap folder

**Student Sitemap**

See File **Student\_Member\_Sitemap.jpg** in Portfolio Version 1, Sitemap folder

**Faculty Sitemap**

See File **Faculty\_Member\_Sitemap.jpg** in Portfolio Version 1, Sitemap folder

**Sitemap Pages:**

**Homepage:**

The initial page that a member (signed-in user) would see when they visit the site (or when the sign-in). There would be work displayed on the homepage in some capacity, which would reflect the users history and profile (comments, bookmarks, interests, etc)

**Create Account:**

An easy to find link on the homepage should take you to a page where an anonymous user would create an account and set up their profile (or a signed in user would be able to edit their profile). Once the account is created, it would take the user to their profile.

**My Profile:**

From the homepage (if logged-in) the user would be able to access their profile page which would show information about them as defined when they create their account (name, profile picture, year, major, dept, interests, an about section, etc). The page would also display a section with the users work (upon the first time visiting their profile, it might prompt the user to create a portfolio). In addition, the user would be able to view and access their bookmarks and click a link to edit their profile.

**Edit Profile:**

This would be reached through a link on the profile page and would allow the user to change their profile information and any other profile specific settings the might have access to.

**Bookmarks:**

From the profile page, the user would be able to access a link of all their bookmarks (portfolios, profiles, projects) and go straight to those bookmarks by clicking on them.

**Manage Work:**

The manage work page would show a user’s portfolios and projects and allow easy access to editing them. Members would be able to access this from the homepage or from a section on their profile page

For the purposes of Projects the word “context” includes:

* Who it belongs to
* Description and purpose
* Department
* Collaborators
* Categorization of some kind
* Term: start date and end date

**Create/Manage Project:**

This would allow the user to upload media, format the media, put media together, arrange them as needed, add text in-line, and add context

**Create/Manage Portfolio:**

This would allow the user to put projects together and add context

**View Profile:**

Every profile would be viewable on its own, it would show all the public information about the user whose profile it was, as well as a section of their work where other users could see any work that they have access to. There would be some way to message the owner of the profile here as well. The user would be able to go directly to that work by clicking a link in the profile’s work section.

**View Portfolio:**

Every portfolio that the user has access to would be viewable on its own, either through browsing or by selecting it on the profile page that it is associated with. This would display the portfolio and all the projects in it, along with its context. The user would be able to click on projects within the portfolio and view them independently.

**View Project:**

Every project that the user has access to would be viewable on its own, either through browsing or by selecting it in the portfolio that it is associated with. This would display the project along with its context, and potentially a feedback section

**Discover:**

This page would allow the user to browse work/profiles. Upon first visiting the page, the user would see all the projects in the portfolio system. It would have a method to explore departments, categories, classes and any other fields deemed appropriate: each field would have a drop-down list of all members of that field (a list of departments in the department field, etc). The lists would be organized so that the user could easily sort through them (organize alphabetically, organize departments by college, classes by department, etc). Exploring a field would change what work is displayed on the discovery page to only show work in that field. The discover page would also be the anonymous user homepage.

**Advanced Search:**

A page that would provide a search function as well as many filters (as listed in the browsing/navigation features section). Upon validating the search, it would take the user to a browsing page with filtered results

**Settings:**

Where the user would change their preferences for the site

**Contact Us:**

Would be a page where the user would be able to contact the development team directly. This might be or include a forum. It would include an “About” section that would provide information about the Portfolio Site (and potentially ASAP).

User Flow Charts

Wireframes

\*\*see wireframes folder in ASAP\_Portfolio\*\*

Storyboards

Class Diagram

Database Schema

Features for future versions

The features that we would like to include, but that are not yet necessary for the portfolio system

Anonymous User Features

* Flag content as inappropriate
* Like with Facebook, G+, social network

Member Features

* System suggests students with similar/complementary interests
* Suggest students/work to other users

- The user could be able to control who is able to provide feedback

* this could control different levels of feedback, i.e.:
  + Only certain users could leave comments/feedback

Faculty profiles should be implemented in a later version of the portfolio system

Student Profile Details

* Expected graduation

Browsing/Navigation

Department specific pages > categories as well?

**Featured** – On main browsing pages (homepage) do we keep it?

Top – returns highest rated projects

Hot – Highest rated in last <timeframe>

Recent – Recently added

Popular – Most viewed in last <timeframe>

**“Random” Tab:** Additional tab on top navigation bar to take you to:

* Random Project
* Random Portfolio
* Random Profile

Interaction with Work

Profiles:

* + Follow
  + Share –
    - To other members
    - To Facebook, Google+, etc.
    - Permalink (available to anyone)

Public Projects:

* + Share
    - To other members
    - To Facebook, Google+, etc.
  + “Like” – “like” and share might be the same for external social networks
  + Rate
  + Flag as inappropriate

Groups of Users

\*\*Under Development, for future consideration.\*\*

A Group is a set of people who share a common attribute or interest. (See below for different examples of groups).

Intrinsically a group has two sections: on the one hand the “Works In Progress” (Private Gallery) section which is compulsory and by default private. On the other hand, the “Public Gallery” section is optional and as its name indicates is publically visible.

Works in Progress

This section is a dedicated space for members who want to receive feedback on their projects. Works in progress are shared within a private gallery, where only the group’s members can view and interact with them.

Public Gallery

This gallery is designed to show some finished works. It’s public and accessible by anybody.

Synthesis diagram:



Concrete example of group:

In the New media group we have a dedicated section for the work in progress. Only members of the New media group can access this section. Anonymous users can only see the public gallery with fully functional works.

External functioning of a group:

* you can create a group (you will become the admin)
* you can follow a group (i.e. you will received notification as soon as a public work is published)
* you can invite a member
* you can delete a group (as the admin)
* you can edit the settings of the group

Internal functioning of a group

* you can take part in a group
* kick a member out
* publish work in the WIP section
* add multiple revisions of your works in the WIP section
* publish work in the public gallery (the last revision is the last accessible)
* editing your work
* push some work from the WIP section to the public gallery
* ask for feedback
* give feedback



By default does each department have their own group?

And furthermore, do other associative groups auto-create groups? (i.e., a student is auto-added to groups for their department, college, work-study jobs, etc.)The notion of open group if accept some new admission or close group (as for example a class group)

Collaborative-work groups (work done with other students, such as research work) is now an attribute.

Do we found in the gallery systematically work from member of this group?

College

* + This group consists of individuals all within the same college.
  + Any member of the college will be able to participate in this group.
  + It functions as a basic grouping for the system.
  + This group does not separate individuals based in the department or major to which they belong.

Department

* + This group contains individuals belonging to a certain department.
  + Any member of the department will be able to participate in the group.
  + This functions as a way of grouping work into similar fields, but not to the degree of specificity of an individual’s major.
  + This group does not separate individuals based on their major or the classes they are taking.

Major

* + This group is comprised of individuals in the same major.
  + Any member of said major may participate in this group.
  + This functions to assemble all the students within a major who will have similar work.
  + This level of classification will not differentiate students based on what classes they may be taking.

Class

* + This group includes individuals in the same class.
  + Any member currently enrolled in the class may participate in this group.
  + This functions as the most specific group as far as academics go. Students may view work that has been done in this class during past terms and may even allow the students to view current students’ work on previous projects.
  + This group does not allow for students to collaborate on projects (see collaborative-work groups) but does allow feedback on projects.

Personal

* + This is not a group, but rather a class of groups. Personal groups are essentially any group that members are able to create and then cater to their needs. If a group is automatically created based on their academic information and current class list.
  + The following lists (Interest, Clubs, Job, and Collaborative-Work) are just templates of settings for group visibility and membership.
  + Most settings should be editable after creation with the exception of interest groups. Interest groups are designed to be community groups where any member can join and make contributions.
  + This group is created by an individual for personal use, such as organizing friends and colleagues of non-academic projects.
  + Since this group is created by the user, the user (who is now the administrator) may choose who participates in the group. This includes the option of allowing users to freely publish work on the groups public gallery, or whether permission must be granted.

Interest

* + - An interest group is a group created by the community to showcase a collection of work based on a particular interest.
    - Since these groups are based purely on interest, these groups will completely public meaning any user may join or leave the group at any time.
    - Any individual seeking feedback on a piece of work may post the work-in-progress to the group, where any member may provide feedback on the piece. If a member publishes a work, they may choose to also publish to the interest group, which would be viewable by anyone who chooses to look at the group, regardless of whether or not they are a member of the group.
    - This group is not for private projects or work that a user does not want to be viewed by others.

Clubs

* + - Club groups are created by members or leaders of a particular club or other extracurricular group to help organize and facilitate communication among members.
    - Upon creating the group, the administrator may choose to make a group open (like interest groups where members may join or leave at any time) or closed (members request to join and must be approved by a group administrator).
    - When work is finished in a club group, it may be either made available to to the public or only viewable by members.
    - This group is not for classwork or purely for interests even though a club may be formed around an interest (i.e. a photography club).

Job

* + - Job groups are for groups of students employed on campus.
    - Only students who are actively employed for a specific job may be members of the group. Or example, only students who are actively employed at ASAP Media Services may be part of this group.
    - Job groups, like other groups, have a private section where members may create projects and other members can provide feedback. When a work is finished, the work has an option to be published so non-members may see the work.
    - This group is not for a club or personal, non-academic, non-job related work.

Collaborative-work

* + - A collaborative-work group is formed by a group of students working toward a common goal. This is most typically school work such as a group project, but may have other applications as well.
    - Any student member may create a collaborative-work group and invite others to the group.
    - This group, while shared by the members, is private until the work is published. Most times, the finished work will be published to a different group (such as a class) but published work may also be viewable by the public.
    - This group is not for a single member, but rather several students working on a common project.