Feature List

Alerts/Todos *(Stage III):* A site-wide notification system which can be controlled by accounts with appropriate privileges (typically administrator accounts.) Notifications will appear in the homepage of the student accounts assigned from the deploy with a message. Messages can optionally have a ‘Call to Action Link’ and can have a set ‘ToDo’ date. This is useful if administrators want to assign a survey, a project, and/or an external task for student users to complete.

Backups *(Stage I):* Automatically performs continuous website and database backups. User information is securely and compliantly stored with revision management software in two separate locations. If data in one location becomes corrupted, a copy of the data is securely backed up elsewhere. As users interact with the website, data is modified, created, and removed from the live website and database. With Scholarly Space’s backups, it is possible to view what the data looked like at a certain point in time. If necessary, the data can be restored. If a user requests to delete data from Scholarly Space’s database, as legally required, the data will also be deleted from backups.

Career Clusters *(Stage I):* Scholarly Space uses the sixteen industry-standard career clusters for module categorization and tagging. The sixteen career clusters are: Agriculture, Food, and Natural Resources; Architecture and Construction; Arts, Audio/Video Technology, and Communications; Business, Management, and Administration; Education and Training; Finance; Government and Public Administration; Health Science; Hospitality and Tourism; Human Services; Information Technology; Law, Public Safety, Corrections, and Security; Manufacturing; Marketing, Sales, and Service; Science, Technology,

Engineering, and Mathematics; Transportation, Distribution, and Logistics.

Collaborative Pages *(Stage I):* Module pages that are common among all users with the same module. Collaborative Pages are used for class and club modules as they facilitate community discussion and posts.

Community Modules *(Stage I):* T his describes a type of module that links to a Collaborative Page. When users add a community module (either a club or class) to their portfolio, they add the module by ‘joining’ the page. The database of classes and clubs are stored on the site’s S QL Database. Classes and clubs can be added to the database directory by administrators.

Daily Scans *(Stage I):* Scholarly Space performs daily malware scans across its entire server. If a security threat is found, it is removed from the server automatically. In addition to this, we monitor all the file changes that occur across the server in order to detect unauthorized access to the site. Scholarly Space also has implemented DDoS protection, SQL Injection prevention, and XSS Injection prevention. We are continuously performing data backups to ensure that our users' data remains safe and secure. We will notify our users (and their parents where applicable) as soon as practical, but not later than 48 hours after we become aware of, or suspect, that any user record under our control has been subject to unauthorized access or suspected unauthorized access.

Document Editor *(Stage I):* The Scholarly Space posting and commenting mechanism. This editor supports HTML and MarkDown formatting, but uses a user-friendly formatting mechanism. The Document Editor supports adding images, videos, and tables, as well as font formatting. See the Scholarly Space Document Editor below:

Goal Manager *(Stage II):* The ability for users to set goals within their Profile . Goals are different from modules. Users have the ability to create goals with a title, a start date, and a target for completion date. Users can also tag modules with custom words and phrases via the Tagging feature, as well as share goals with other users on the site using the Sharing feature. When a user completes a goal, they can mark the goal as completed.

Google Integration *(Stage I):* The ability to securely ‘Login with Google’ and sign up with Google. When a new user selects this option, Google OAuth will ensure that the user in question has an email hosted with er9.org and will open up a student account in the SQL database. This user account stores the student or administrator's first name, last name, er9 email address, and google ID number from the google account. Password and non-’Directory’ information is not stored or fetched from the Google account. When a returning user selects the ‘Login with Google’ option, Google OAuth verifies the user’s email address and password and grants the user permission to their account.

Independent Modules *(Stage I):* This describes a type of module that links to an Independent Page. Independent Page’s are owned by the user that created the module. However, the module owner can invite other users to view and comment on the module page through Sharing.

Independent Pages *(Stage II):* Scholarly Space currently provides two primary types of internal pages for modules. Independent Pages are, by default, only accessible to the user who created the page’s associated module. Independent Pages are used for Project, Independent Study, Work Experience, and Other Extracurricular modules as these types of modules are primarily independent work. However, the module owner can invite other users to view and comment on the module page through Sharing. This is especially useful if the module owner wants feedback

from a teacher, a peer, or a Community Asset. In addition, if the module owner is working on a Passages Project or Independent Study, they can share the module with an advisor who can post prompts and/or assignments to the Independent Page.

Modules *(Stage I):* Modules are the centerpiece of Scholarly Space. The contents of a user's portfolio is comprised of separate modules. There are currently six different types of modules: Projects (displayed graphically as circles), Classes (displayed as squares), Clubs (displayed as triangles), Independent Studies (displayed as diamonds), Work Experiences (displayed as pentagons), and Other Extracurriculars (displayed as hexagons). Each module has one associated career cluster and one associated academic area. Other identifying terms can be added via Tagging. These two identifiers are used to graphically position and display the modules on the Navigator and Sidebar. The modules are color-coded based on their respective career clusters. Each module is also created with a page link. The user (or administrator) can provide a link to an external webpage. Otherwise, a page will be generated on the Scholarly Space website. Modules are highlighted on the Navigator below:

Navigator *(Stage I):* The primary graphical interface element for the Scholarly Space website. The Navigator refers to the displaying of differently shaped and colored modules on the interactive canvas. The Navigator also includes the concentric circles for different grade levels as well as the eight sectors for different academic areas (Mathematics, Science, Health & Physical Education, Social Studies, Fine & Applied Arts, Language, Technology & Engineering, and Literature.) The Navigator is displayed below:

Portfolio Export *(Stage III):* Allows a user to generate a PDF and/or Word document of their dynamic online portfolio. This includes a

student's involvement and activity in clubs, classes, projects, work experience, and other extracurriculars. The exported document resembles a 'resume' for the user. Users can modify what they would like to include in the Portfolio Export. Users have the option to include specific media from various modules, to include or omit specific modules, and whether or not to include associated career clusters and tags associated with various modules.

Profile *(Stage II):* A private page unique to the user allowing them to view their 'Basic Information' (first name, last name, email, grade level, and current school), as well as create, manage, and view their goals through the Goal Manager . The Profile also includes a user's Activity Log. A user can access their Profile by clicking on the circle labeled with their name in the center of the Navigator, or by clicking their name in the top left corner of the site. Users can also change the color of their center circle from the Profile , or set the circle to a custom image.

Proprietary Account Sign Up *(Stage II):* Allows students to create an account on the Scholarly Space website without having to login with a Google account. The Proprietary Account Sign Up does not use any 3rd party services. Rather, the user in question can enter a valid er9 email address, first name, last name, grade level, and secure password to create an account. The Proprietary Account Sign Up will send a confirmation email to the er9 account in question, requiring the user to confirm they own the email address in question and have the ability to create an account. This option will open up a student account in the SQL Database. This user account stores the student's or administrator's first name, last name, er9 email address, and encrypted password. Non-'Directory' information is not stored on the database and is not asked of the user.

Search *(Stage II):* Another way for users to navigate their portfolio and

account elements. Users can quickly open a module or external link by searching for the element in question. Tagging informs the search bar algorithm, as does the module's and element's respective career clusters and associated academic areas. The Search bar is highlighted in the image below:

Sharing *(Stage II):* Allows users who own a specific module to grant editing and/or viewing permissions to other users on the site via an email. This allows collaboration on Independent Pages.

Sidebar *(Stage I):* A second graphical interface for the user to navigate and interact with their portfolio's modules. The Sidebar displays categorized modules vertically in an 'accordion style' navigator. The module's categories (i.e. Projects, Classes, Clubs, etc) are collapsible to reduce clutter. The sidebar is displayed below:

SQL Database *(Stage I):* All module data on the Scholarly Space site is stored on a large SQL Database. This database is editable by administrators. Because of this, administrators can dynamically add or edit class and club modules on the database, and the modules will update on all the site users' portfolios. This allows teachers, if they desire, to change their class module from an internal Collaborative Page to an external page (i.e. Google Classroom, Edmodo, etc), and vise versa.

SSL EV *(Stage I):* Scholarly Space uses Secure Sockets Layer (SSL)/Transport Layer Security (TLS) to protect data in transit between Dropbox apps and our servers; This is designed to create a secure tunnel protected by 128-bit or higher Advanced Encryption Standard (AES) encryption. When a browser attempts to access a website that is secured by SSL, the browser and the web server establish an SSL connection using a process called an "SSL Handshake." Note that the

SSL Handshake is invisible to the user and happens instantaneously. Essentially, three keys are used to set up the SSL connection: the public, private, and session keys. Anything encrypted with the public key can only be decrypted with the private key, and vice versa. Because encrypting and decrypting with private and public key takes a lot of processing power, they are only used during the SSL Handshake to create a symmetric session key. After the secure connection is made, the session key is used to encrypt all transmitted data. Scholarly Space is proud to use SSL EV, the most highly-trusted way to secure an SSL connection. An Extended Validation Certificate (EV) is a public key certificate that proves the legal entity controlling a web site or software package. Obtaining an EV certificate requires verification of the requesting entity's identity by a certificate authority. EV certificates are used when establishing HTTPS connections between web browsers and web servers. See certificate below:

Tagging *(Stage II):* Allows the user to assign tags – words and phrases – to a specific module. Modules are automatically generated with two tags: the module's career cluster and associated academic area. Users can add as many tags as they want to a module. Tagging allows users to more easily keep track of their modules as they will be accessible via Search. Tagging also allows students to view relationships and patterns of their online portfolio. In addition, tagging allows students to more comprehensively describe and categorize the module in question as it allows users to assign the module to multiple career clusters and academic areas. However, the module will still have one primary career cluster and academic area used to categorize the module in the site Navigator and Sidebar. Scholarly Space uses tagging to inform various data analysis features such as Word-Cloud Generation.

Activity Log *(Stage III):* Allows users to view their account activity as well as the date and time of the activity. The Activity Log displays various

past actions such as module creation, module editing, and module sharing. The Activity Log is especially useful for its ability to display whether a user's module was modified by a separate user who had been granted editing access via the S haring feature. The Activity Log will also display comment and post activity from the user's Community Modules – such as clubs and classes.

User Guide *(Stage III):* A comprehensive and user-friendly guide for student and administrator users to navigate the front-end Scholarly Space website and (for administrators) the back-end Scholarly Space database.

Word-Cloud Generation *(Stage II):* At any point in time, users can generate a word-cloud based on their portfolio. The word-cloud is generated using the terms associated with all the user's modules – included tags, career clusters, and academic areas. Terms that occur in the portfolio more than once appear larger. Word-Cloud Generation allows users to see trends in their portfolio, including the career clusters they most commonly use. An example word cloud is visible below: