



VSRI

Technical Functionality Specifications Document

.....
PREPARED FOR: » Dr. Gary Samuelson, Zach Bush / Seraphic Group

.....
PROJECT NAME: » VSRI Online Community / Social Network

.....
DATE: » October 6, 2015

.....
PREPARED BY: » Nick Jessen & Dann Ledwick

.....
CONTACT: » dann@modernizedmedia.com / 408.340.3600 (mobile)

TABLE OF CONTENTS

VSRI WORKFLOW

3

VSRI OVERVIEW

4

VSRI INDEPENDENT RESEARCHER AREA

8

VSRI INSTITUTIONAL USER AREA

14

VSRI INDUSTRY PARTNER AREA

20

VSRI ADMINISTRATOR BACKEND

26

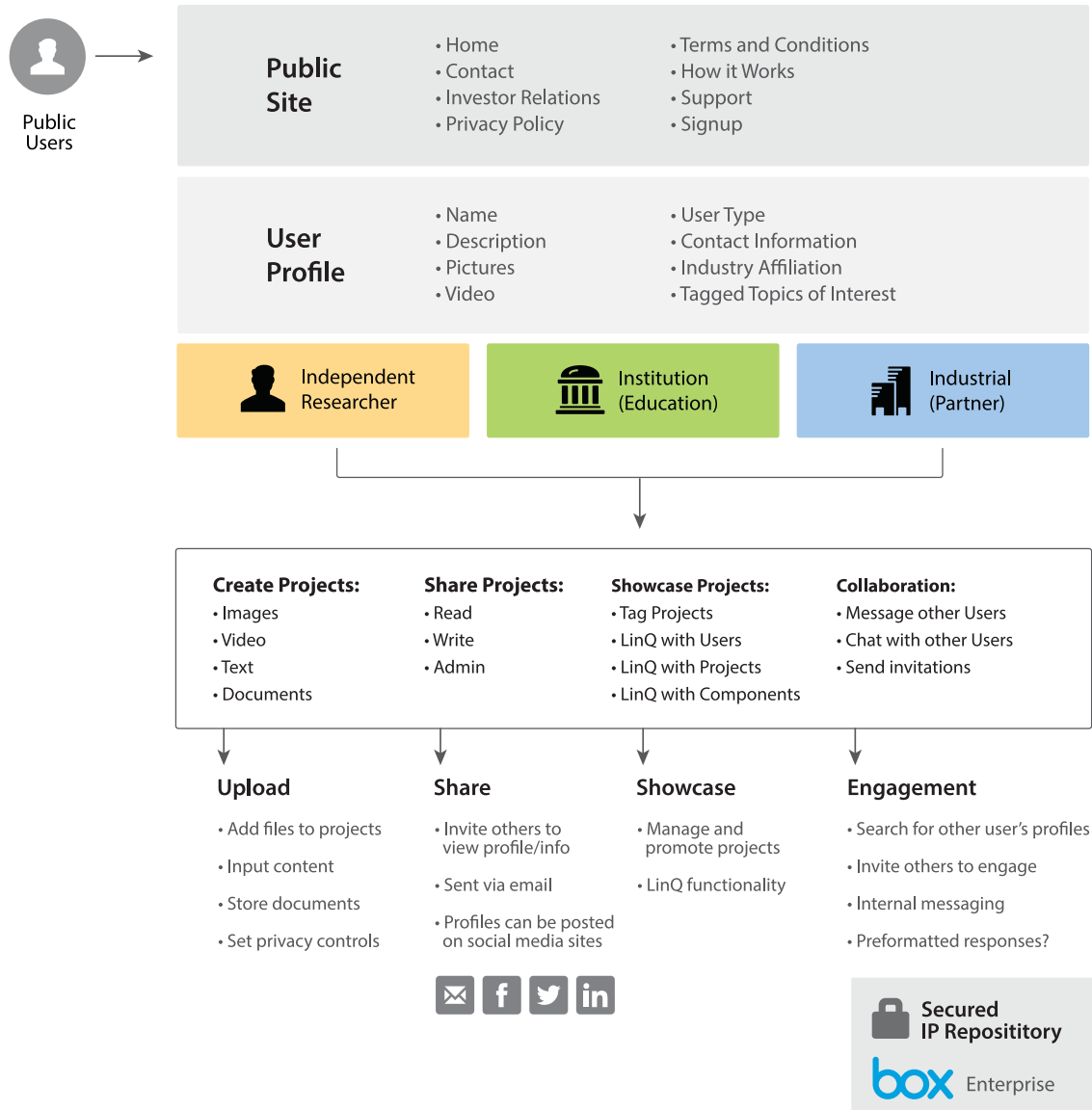
VSRI PUBLIC SITE

28

VSRI SYSTEM

30

VSRI WORKFLOW



VSRI OVERVIEW

OBJECTIVE

Setup the core system for VSRI to function

USERS

Independent Researcher Users: customers who have access to create a profile, showcase and tag projects, connect with other users, chat, message, search, recommend users, invite colleagues, offer services, and update settings

Institutional Users: customers affiliated with institutions that have the functionality of independent users with additional access to create a profile for their institution and update settings for their institution

Industry Partner Users: customers affiliated with companies who have access to create a profile for their company, showcase and tag projects, offer services, and connect with other users

Administrators: users that have access to the administration sections for VSRI

Public Users: users that do not have an account and have not signed up who are enticed to sign up by external content pages

SCOPE

Independent Researcher User Area - An area needs to be created to allow Independent Researcher Users to:

- Create a Profile, including
 - Name
 - Description
 - Pictures
 - Video
 - Contact Information
 - Industry Affiliation
 - Tagged Topics of Interest
- Create Projects, which can contain one or more of the following components:
 - Images
 - Video
 - Text

- Documents
- Share Projects or Components with others, with the following permission levels:
 - Read
 - Write
 - Admin (the ability to write and to share with others)
- Showcase Projects on the User Profile
- Tag Projects
- LinQ with Users
- LinQ with Projects
- LinQ with Components
- Message other Users
- Chat with other Users
- Change Settings
 - Notifications
 - Defaults for Project Visibility
- Invite non-users to the platform
- Offer services
- Search for Projects, Services, and other Users

Institutional User Area - An area needs to be created to allow Institutional Users to:

- Create a Profile, including
 - Name
 - Description
 - Pictures
 - Video
 - Contact Information
 - Institutional Affiliation
 - Tagged Topics of Interest
- Create Projects, which can contain one or more of the following components:
 - Images
 - Video
 - Text
 - Documents
- Share Projects or Components with others, with the following permission levels:
 - Read
 - Write
- Showcase Projects on the User Profile
- Tag Projects
- LinQ with Users
- LinQ with Projects
- LinQ with Components

- Message other Users
- Chat with other Users
- Change Settings
 - Notifications
 - Defaults for Project Visibility
- Invite non-users to the platform
- Offer services
- Search for Projects, Services, and other Users
- Create Institutional Profile
 - Logo
 - Video
 - Description
 - Manage Affiliated Users

Industry Partner User Area – An area needs to be created to allow Industry Partner Users to:

- Create a Profile, including
 - Name
 - Description
 - Pictures
 - Video
 - Contact Information
 - Industry Affiliation
 - Tagged Topics of Interest
- Create Projects, which can contain one or more of the following components:
 - Images
 - Video
 - Text
 - Documents
- Share Projects or Components with others, with the following permission levels:
 - Read
 - Write
- Showcase Projects on the User Profile
- Tag Projects
- View Projects by Industry
- Tag Projects
- LinQ with Users
- LinQ with Projects
- LinQ with Components
- Change Settings
 - Notifications
 - Defaults for Project Visibility
- Invite non-users to the platform

- Offer services
- Search for Projects, Services, and other Users
- Create Company Profile
 - Logo
 - Video
 - Description
 - Manage Affiliated Users

Administrator Backend – an Administrator backend needs to be created to allow administrators to:

- Manage Users
- View Metrics
 - Signups
 - LinQs
 - Engagement
 - Time On Site
 - Login Frequency
 - Tags
 - Projects
 - Users By Type
- Handle Support Requests

Public Site – Content pages need to be created outside of the main system to entice users to join, including:

- Home
- Contact
- Investor Relations
- Privacy Policy
- Terms and Conditions
- How it Works
- Support
- Signup

System – a passive background system needs to be set up which will:

- Make passive recommendations to users for projects and other users that they should LinQ to projects or other users
- Pass messages and chats to user email
- Index users and projects for quick searching and passive recommendations

WORK SCHEDULE

ITEM	DESCRIPTION	HOURS
Independent Researcher Area	Creation of Independent Researcher User Area for all Independent Researcher Users to use the system.	160
Institutional User Area	Creation of Institutional User Area for all Institutional Users to use the system.	80
Industry Partner Area	Creation of Industry Partner Area for all Industry Partner Users to use the system.	80
Administrator Backend	Creation of an Administrator Backend for administrators to manage the system.	80
Public Site and Signup	Creation of a public site and signup process for users.	40
System	Creation of a system for passive notifications, indexing of data, and core functionality.	160
Total		600

VSRI INDEPENDENT RESEARCHER AREA

OBJECTIVE

An area needs to be created to allow Independent Researcher Users to:

- Create a Profile, including
 - Name
 - Description
 - Pictures
 - Video
 - Contact Information
 - Industry Affiliation
 - Tagged Topics of Interest

- Create Projects, which can contain one or more of the following components:
 - Images
 - Video
 - Text
 - Documents
- Share Projects or Components with others, with the following permission levels:
 - Read
 - Write
 - Admin (the ability to write and to share with others)
- Showcase Projects on the User Profile
- Tag Projects
- LinQ with Users
- LinQ with Projects
- LinQ with Components
- Message other Users
- Chat with other Users
- Change Settings
 - Notifications
 - Defaults for Project Visibility
- Invite non-users to the platform
- Offer services
- Search for Projects, Services, and other Users

USERS

Independent Researcher Users: customers who have access to create a profile, showcase and tag projects, connect with other users, chat, message, search, recommend users, invite colleagues, offer services, and update settings.

SCOPE

Independent Researcher User Area – An area needs to be created to allow Independent Researcher Users to:

- Create a Profile, including
 - Name
 - Description
 - Pictures
 - Video
 - Contact Information
 - Industry Affiliation
 - Tagged Topics of Interest
- Create Projects, which can contain one or more of the following components:
 - Images

- Video
 - Text
 - Documents
- Share Projects or Components with others, with the following permission levels:
 - Read
 - Write
 - Admin (the ability to write and to share with others)
- Showcase Projects on the User Profile
- Tag Projects
- LinQ with Users
- LinQ with Projects
- LinQ with Components
- Message other Users
- Chat with other Users
- Change Settings
 - Notifications
 - Defaults for Project Visibility
- Invite non-users to the platform
- Offer services
- Search for Projects, Services, and other Users

SCENARIOS

1. An independent researcher creates a profile by going through a signup process. The signup process initially asks the independent researcher questions regarding their name, description, research specialties, and any other questions deemed important by the System. The user is requested to upload a photo and also has the option to add a video to their account. These areas are skippable and can be skipped by the researcher as part of their signup process.
2. An independent researcher, upon signup, is asked to talk about their first initial project. Their project will include a title and description, but can also include images, video and other text. The entire project can be shared upon creation with other users or the public, or individual aspects of the project can be shared. The three sharing levels for the project or project components will be Read-only access or Write access (so other users can modify the project as if they owned it). All components will, by default, share the parent project access, but can be turned off if desired.

These projects are not intended to be the file storage or sharing system – simply a showcase of projects and ideas that are searchable by users.

3. An independent researcher can LinQ with other users, projects, or components. A LinQ is engaged upon by either the user proactively searching for a user, project, or component, or by the System recommending a user, project, or component to the user via email. The details of the algorithmic recommendations are contained in the System specification. When the user clicks on the "LinQ" button, if they already have read-only access, write access, or admin access granted, the "LinQ" will accept that access and the "LinQ" will be accepted. If the user has no access, a request will be sent to the users with Admin access on an artifact requesting read-only access to the system.
4. An independent researcher can message or chat any user that they have LinQed with. A user may not message or chat a user just because they are LinQed on a project. They can modify the project based on levels of access they have set, but they will need to LinQ with a user to message them directly.
5. An independent researcher can change their settings for notifications. Initially, notifications will be an on/off switch to be notified of new LinQ requests, project modifications, and system-generated LinQs or searches. From the same screen an independent researcher will be able to change their defaults for project and component visibility so they can have every project show as "public", or "read-only" by default.
6. An independent researcher can invite users to the platform. The invites will include email invitations and be templated for other social networks. The ability to send the invite to other social networks will not be included at launch, but can be added at a later date. The ability for a user to send the invite to other social networks will always be dependent on the privacy settings and regulations of that social network and will generally use the social network's messaging component for invitation delivery.
7. An independent researcher can search for projects, users, or services. The search feature will initially search all databases per the System specification, but the search can be further customized by an Advanced Search which will allow for the user to search for one or all of those three result types. The search will include an autocomplete as the search is typed and have the option to share the search with the user's LinQed network. An independent researcher will not be able to search for project components.
8. An independent researcher can offer services on the platform. These services will be very basic and appear as listings on the platform, similar to projects. These services do not imply marketplace or eCommerce functionality, but are a list of services that can be searched for in the search component as part of a member's profile.

SPECIFIC EXAMPLES

1. Independent Researcher A creates a profile and a set of 3 projects. He or she then searches for 5 users and sends LinQ requests to them. He is passively notified of another user and project that interests him or her via email and sends LinQ requests at the email prompting. His or her project receives a notification that he or she has 2 people that would like to LinQ with that project. He or she accepts the LinQ request and sets permission levels to Read-Only access. He or she adds an additional project to the project showcase and then shares that project with one of the users with Admin access.
2. Independent Researcher B creates a profile with no projects. Based on his or her profile information, recommendations are made to the user by the System for projects and potential LinQs in the area of specialty the user identified in initial setup. He or she clicks to LinQ with the project and is sent notification when the LinQ request is accepted as read-only.
3. Independent Researcher C creates a profile and offers "Grant Writing" services. These services are set to public. Independent Researcher D searches for "grant writing services" and Independent Researcher C appears in the search results. Independent Researcher D sends a LinQ request to Independent Researcher C. Independent Researcher C accepts the LinQ request and messages Independent Researcher D with the specifics of the services that are offered.
4. Independent Researcher E has created a profile with 15 LinQs. Independent Researcher E engages in a chat with Independent Researcher F regarding a protein strain that Independent Researcher F has listed in their profile as a research specialty.

NOTES

An Independent Researcher will self-identify in the signup process from the Public Site by selecting the Independent Researcher response to the question "Please select your industry role."

FUNCTIONAL REQUIREMENTS

1. A signup process will be created to allow a user to sign up. This script should:
 - a. Ask specific questions to identify the user.
 - b. Allow for basic profile creation.

- c. Allow for users to create their first project.
 - d. Get the user into the system as quickly as possible.
- 2. A dashboard will be created to allow a user to manage their profile. This dashboard should:
 - a. Allow for the user to upload images, video, and text.
 - b. Allow for a user to search.
 - c. Allow for a user to message and chat other users and respond to messages and chats received.
 - d. Allow for a user to add and modify projects, including setting access levels and showing what projects are available in the project showcase.
 - e. Allow for a user to add and modify services to their profile.
 - f. Allow for a user to see their LinQs and LinQ requests and accept or deny those requests and make more requests available.
- 3. A settings area will be created to allow a user to manage their settings. This settings area should:
 - a. Allow for a user to modify their notifications settings.
 - b. Allow for a user to modify their default permissions.
- 4. An invitation area will be created to allow a user to invite other users. The invitation area should:
 - a. Allow for a user to upload a CSV of names and email addresses to invite users to.
 - b. Allow for a user to invite users by entering name and email.

WORK SCHEDULE

ITEM	DESCRIPTION	HOURS
Sign up process	Sign up process	40
Dashboard	Dashboard for profile management	100
Settings Area	Area to manage Settings	10
Invitation Area	Area to manage invitations of other users	10
Total		160

VSRI INSTITUTIONAL USER AREA

OBJECTIVE

An area needs to be created to allow Institutional Users to:

- Create a Profile, including
 - Name
 - Description
 - Pictures
 - Video
 - Contact Information
 - Institutional Affiliation
 - Tagged Topics of Interest
- Create Projects, which can contain one or more of the following components:
 - Images
 - Video
 - Text
 - Documents
- Share Projects or Components with others, with the following permission levels:
 - Read
 - Write
- Showcase Projects on the User Profile
- Tag Projects
- LinQ with Users
- LinQ with Projects
- LinQ with Components
- Message other Users
- Chat with other Users
- Change Settings
 - Notifications
 - Defaults for Project Visibility
- Invite non-users to the platform
- Offer services
- Search for Projects, Services, and other Users
- Create Institutional Profile
 - Logo
 - Video
 - Description
 - Manage Affiliated Users

USERS

Institutional Users: customers affiliated with institutions that have the functionality of independent users with additional access to create a profile for their institution and update settings for their institution.

SCOPE

Institutional User Area - An area needs to be created to allow Institutional Users to:

- Create a Profile, including
 - Name
 - Description
 - Pictures
 - Video
 - Contact Information
 - Institutional Affiliation
 - Tagged Topics of Interest
- Create Projects, which can contain one or more of the following components:
 - Images
 - Video
 - Text
 - Documents
- Share Projects or Components with others, with the following permission levels:
 - Read
 - Write
- Showcase Projects on the User Profile
- Tag Projects
- LinQ with Users
- LinQ with Projects
- LinQ with Components
- Message other Users
- Chat with other Users
- Change Settings
 - Notifications
 - Defaults for Project Visibility
- Invite non-users to the platform
- Offer services
- Search for Projects, Services, and other Users
- Create Institutional Profile
 - Logo
 - Video
 - Description
 - Manage Affiliated Users

SCENARIOS

1. An institutional user creates a profile by going through a signup process. The signup process initially asks the institutional user questions regarding their name, description, research specialties, and any other questions deemed important by the System. The user is requested to upload a photo and also has the option to add a video to their account. These areas are skippable and can be skipped by the institutional user as part of their signup process, but institutional users are required to enter the name of their institution as part of the profile signup process.
2. An institutional user creates an institutional profile as well that represents their institution or sub-area of their institution. The institutional profile contains the ability to upload a logo, video, and description for their institution. The institutional user will also be able to view other users affiliated with their institution, and if the user created the institution, he or she will be able to revoke the affiliation with that institution.
3. An institutional user, upon signup, is asked to talk about their first initial project. Their project will include a title and description, but can also include images, video and other text. The entire project can be shared upon creation with other users or the public, or individual aspects of the project can be shared. The three sharing levels for the project or project components will be Read-only access or Write access (so other users can modify the project as if they owned it). All components will, by default, share the parent project access, but can be turned off if desired.

These projects are not intended to be the file storage or sharing system – simply a showcase of projects and ideas that are searchable by users.

4. An institutional user can LinQ with other users, projects, or components. A LinQ is engaged upon by either the user proactively searching for a user, project, or component, or by the System recommending a user, project, or component to the user via email. The details of the algorithmic recommendations are contained in the System specification. When the user clicks on the “LinQ” button, if they already have read-only access, write access, or admin access granted, the “LinQ” will accept that access and the “LinQ” will be accepted. If the user has no access, a request will be sent to the users with Admin access on an artifact requesting access to the system.
5. An institutional user can message or chat any user that they have LinQed with. A user may not message or chat a user just because they are LinQed on a project. They can modify the project based on levels of access they have set, but they will need to LinQ with a user to message them directly.

6. An institutional user can change their settings for notifications. Initially, notifications will be an on/off switch to be notified of new LinQ requests, project modifications, new affiliations with the institution, and system-generated LinQs or searches. From the same screen an institutional user will be able to change their defaults for project and component visibility so they can have every project show as “public”, or “read-only” by default.
7. An institutional user can invite users to the platform. The invites will include email invitations and be templated for other social networks. The ability to send the invite to other social networks will not be included at launch, but can be added at a later date. The ability for a user to send the invite to other social networks will always be dependent on the privacy settings and regulations of that social network and will generally use the social network’s messaging component for invitation delivery.
8. An institutional user can search for projects, users, or services. The search feature will initially search all databases per the System specification, but the search can be further customized by an Advanced Search which will allow for the user to search for one or all of those three result types. The search will include an autocomplete as the search is typed and have the option to share the search with the user’s LinQed network. An institutional user will not be able to search for project components.
9. An institutional user can offer services on the platform. These services will be very basic and appear as listings on the platform, similar to projects. These services do not imply marketplace or eCommerce functionality, but are a list of services that can be searched for in the search component as part of a member’s profile.

SPECIFIC EXAMPLES

1. Institutional User A creates a profile and a set of 3 projects. He or she also creates Institution A and uploads a logo, video, and description for his or her institution. He or she then searches for 5 users and sends LinQ requests to them. He searches for 2 users and adds them to affiliations with his or her Institution A. He is passively notified of another user and project that interests him or her via email and sends LinQ requests at the email prompting. His or her project receives a notification that he or she has 2 people that would like to LinQ with that project. He or she accepts the LinQ request and sets permission levels to Read-Only access. He or she adds an additional project to the project showcase and then shares that project with one of the users with Admin access.

2. Institutional User B creates a profile with no projects. Based on his or her profile information, recommendations are made to the user by the System for projects and potential LinQs in the area of specialty the user identified in initial setup. He or she clicks to LinQ with the project and is sent notification when the LinQ request is accepted as read-only.
3. Institutional User C creates a profile and offers "Laboratory Rental" services. These services are set to public. Institutional User D searches for "laboratory rental services" and Institutional User C appears in the search results. Institutional User D sends a LinQ request to Institutional User C. Institutional User C accepts the LinQ request and messages Institutional User D with the specifics of the services that are offered.
4. Institutional User E has created a profile with 15 LinQs. Institutional User E engages in a chat with Independent Researcher F regarding a protein strain that Independent Researcher F has listed in their profile as a research specialty.

NOTES

An Institutional User will self-identify in the signup process from the Public Site by selecting the Institutional User response to the question "Please select your industry role."

FUNCTIONAL REQUIREMENTS

1. A signup process will be created to allow a user to sign up. This script should:
 - a. Ask specific questions to identify the user.
 - b. Allow for basic profile creation.
 - c. Allow for users to create their first project.
 - d. Get the user into the system as quickly as possible.
2. A dashboard will be created to allow a user to manage their profile. This dashboard should:
 - a. Allow for the user to upload images, video, and text.
 - b. Allow for a user to search.
 - c. Allow for a user to message and chat other users and respond to messages and chats received.
 - d. Allow for a user to add and modify projects, including setting access levels and showing what projects are available in the project showcase.
 - e. Allow for a user to add and modify services to their profile.
 - f. Allow for a user to see their LinQs and LinQ requests and accept or deny those requests and make more requests available.
3. A settings area will be created to allow a user to manage their settings. This settings area should:

- a. Allow for a user to modify their notifications settings.
 - b. Allow for a user to modify their default permissions.
- 4. An invitation area will be created to allow a user to invite other users. The invitation area should:
 - a. Allow for a user to upload a CSV of names and email addresses to invite users to.
 - b. Allow for a user to invite users by entering name and email.
- 5. An institution profile area will be created to allow the institutional user to manage their institution. The institution profile area should:
 - a. Allow for a user to upload a logo of their institution.
 - b. Allow for a user to add a name and description for their institution.
 - c. Allow for a user to manage users affiliated with their institution.
 - d. Allow for a user to manage videos about their institution.

WORK SCHEDULE

ITEM	DESCRIPTION	HOURS
Sign up process	Sign up process	8
Dashboard	Dashboard for profile management	50
Settings Area	Area to manage Settings	1
Invitation Area	Area to manage invitations of other users	1
Institution Profile Area	Area to manage institution & affiliated users	20
Total		80

VSRI INDUSTRY PARTNER AREA

OBJECTIVE

An area needs to be created to allow Industry Partners to:

- Create a Profile, including
 - Name
 - Description
 - Pictures
 - Video
 - Contact Information
 - Industry Affiliation
 - Tagged Topics of Interest
- Create Projects, which can contain one or more of the following components:
 - Images
 - Video
 - Text
 - Documents
- Share Projects or Components with others, with the following permission levels:
 - Read
 - Write
- Showcase Projects on the User Profile
- Tag Projects
- View Projects by Industry
- Tag Projects
- LinQ with Users
- LinQ with Projects
- LinQ with Components
- Change Settings
 - Notifications
 - Defaults for Project Visibility
- Invite non-users to the platform
- Offer services
- Search for Projects, Services, and other Users
- Create Company Profile
 - Logo
 - Video
 - Description
 - Manage Affiliated User

USERS

Industry Partner Users: customers affiliated with companies who have access to create a profile for their company, showcase and tag projects, offer services, and connect with other users.

SCOPE

Industry Partner User Area - An area needs to be created to allow Industry Partner Users to:

- Create a Profile, including
 - Name
 - Description
 - Pictures
 - Video
 - Contact Information
 - Industry Affiliation
 - Tagged Topics of Interest
- Create Projects, which can contain one or more of the following components:
 - Images
 - Video
 - Text
 - Documents
- Share Projects or Components with others, with the following permission levels:
 - Read
 - Write
- Showcase Projects on the User Profile
- Tag Projects
- View Projects by Industry
- Tag Projects
- LinQ with Users
- LinQ with Projects
- LinQ with Components
- Change Settings
 - Notifications
 - Defaults for Project Visibility
- Invite non-users to the platform
- Offer services
- Search for Projects, Services, and other Users
- Create Company Profile
 - Logo
 - Video
 - Description
 - Manage Affiliated Users

SCENARIOS

1. An industry partner user creates a profile by going through a signup process. The signup process initially asks the industry partner user questions regarding their name, description, industry focus, and any other questions deemed important by the System. The user is requested to upload a photo and also has the option to add a video to their account. These areas are skippable and can be skipped by the industry partner user as part of their signup process, but industry partner users are required to enter the name of their company as part of the profile signup process.
2. An industry partner user creates a company as well that represents their company or sub-area of their company. The industry partner profile contains the ability to upload a logo, video, and description for their company. The industry partner user will also be able to view other users affiliated with their company, and if the user created the company, he or she will be able to revoke the affiliation with that company.
3. An industry partner user, upon signup, is asked to talk about their first initial project. Their project will include a title and description, but can also include images, video and other text. The entire project can be shared upon creation with other users or the public, or individual aspects of the project can be shared. The three sharing levels for the project or project components will be Read-only access or Write access (so other users can modify the project as if they owned it). All components will, by default, share the parent project access, but can be turned off if desired.

These projects are not intended to be the file storage or sharing system – simply a showcase of projects and ideas that are searchable by users.

4. An industry partner user can LinQ with other users, projects, or components. A LinQ is engaged upon by either the user proactively searching for a user, project, or component, or by the System recommending a user, project, or component to the user via email. The details of the algorithmic recommendations are contained in the System specification. When the user clicks on the “LinQ” button, if they already have read-only access, write access, or admin access granted, the “LinQ” will accept that access and the “LinQ” will be accepted. If the user has no access, a request will be sent to the users with Admin access on an artifact requesting access to the system.
5. An industry partner user can message or chat any user that they have LinQed with. A user may not message or chat a user just because they are LinQed on a project. They can modify the project based on levels of access they have set, but they will need to LinQ with a user to message them directly.

6. An industry partner user can change their settings for notifications. Initially, notifications will be an on/off switch to be notified of new LinQ requests, project modifications, new affiliations with the company, and system-generated LinQs or searches. From the same screen an industry partner user will be able to change their defaults for project and component visibility so they can have every project show as “public”, or “read-only” by default.
7. An industry partner user can invite users to the platform. The invites will include email invitations and be templated for other social networks. The ability to send the invite to other social networks will not be included at launch, but can be added at a later date. The ability for a user to send the invite to other social networks will always be dependent on the privacy settings and regulations of that social network and will generally use the social network’s messaging component for invitation delivery.
8. An industry partner user can search for projects, users, or services. The search feature will initially search all databases per the System specification, but the search can be further customized by an Advanced Search which will allow for the user to search for one or all of those three result types. The search will include an autocomplete as the search is typed and have the option to share the search with the user’s LinQed network. An institutional user will not be able to search for project components.
9. An industry partner user can offer services on the platform. These services will be very basic and appear as listings on the platform, similar to projects. These services do not imply marketplace or eCommerce functionality, but are a list of services that can be searched for in the search component as part of a member’s profile.

SPECIFIC EXAMPLES

1. Industry Partner User A creates a profile and a set of 3 projects. He or she also creates Company A and uploads a logo, video, and description for his or her company. He or she then searches for 5 users and sends LinQ requests to them. He searches for 2 users and adds them to affiliations with his or her Company A. He is passively notified of another user and project that interests him or her via email and sends LinQ requests at the email prompting. His or her project receives a notification that he or she has 2 people that would like to LinQ with that project. He or she accepts the LinQ request and sets permission levels to Read-Only access. He or she adds an additional project to the project showcase and then shares that project with one of the users with Admin access.

2. Industry Partner User B creates a profile with no projects. Based on his or her profile information, recommendations are made to the user by the System for projects and potential LinQs in the industry of the user identified in initial setup. He or she clicks to LinQ with the project and is sent notification when the LinQ request is accepted as read-only.
3. Industry Partner User C creates a profile and offers "Research Funding" services. These services are set to public. Independent Researcher User D searches for "research funding services" and Industry Partner User C appears in the search results. Independent Researcher User D sends a LinQ request to Industry Partner User C. Industry Partner User C accepts the LinQ request and messages Independent Researcher User D with the specifics of the services that are offered.
4. Industry Partner User E has created a profile with 15 LinQs. Industry Partner User E engages in a chat with Independent Researcher F regarding a protein strain that Independent Researcher F has listed in their profile as a research specialty.

NOTES

An Industry Partner User will self-identify in the signup process from the Public Site by selecting the Industry Partner User response to the question "Please select your industry role."

FUNCTIONAL REQUIREMENTS

1. A signup process will be created to allow a user to sign up. This script should:
 - a. Ask specific questions to identify the user.
 - b. Allow for basic profile creation.
 - c. Allow for users to create their first project.
 - d. Get the user into the system as quickly as possible.
2. A dashboard will be created to allow a user to manage their profile. This dashboard should:
 - a. Allow for the user to upload images, video, and text.
 - b. Allow for a user to search.
 - c. Allow for a user to message and chat other users and respond to messages and chats received.
 - d. Allow for a user to add and modify projects, including setting access levels and showing what projects are available in the project showcase.
 - e. Allow for a user to add and modify services to their profile.
 - f. Allow for a user to see their LinQs and LinQ requests and accept or deny those requests and make more requests available.

3. A settings area will be created to allow a user to manage their settings. This settings area should:
 - a. Allow for a user to modify their notifications settings.
 - b. Allow for a user to modify their default permissions.
4. An invitation area will be created to allow a user to invite other users. The invitation area should:
 - a. Allow for a user to upload a CSV of names and email addresses to invite users to.
 - b. Allow for a user to invite users by entering name and email.
5. A company profile area will be created to allow the industry partner to manage their company. The company profile area should:
 - a. Allow for a user to upload a logo of their company.
 - b. Allow for a user to add a name and description for their company.
 - c. Allow for a user to manage users affiliated with their company.
 - d. Allow for a user to manage videos about their company.

WORK SCHEDULE

ITEM	DESCRIPTION	HOURS
Sign up process	Sign up process	8
Dashboard	Dashboard for profile management	50
Settings Area	Area to manage Settings	1
Invitation Area	Area to manage invitations of other users	1
Company Profile Area	Area to manage company profile	20
Total		80

VSRI ADMINISTRATOR BACKEND

OBJECTIVE

An area needs to be created to allow Administrators to:

- Manage Users
- View Metrics
 - Signups
 - LinQs
 - Engagement
 - Time On Site
 - Login Frequency
 - Tags
 - Projects
 - Users By Type
- Handle Support Requests

USERS

Administrators: users that have access to the administration sections for VSRI

SCOPE

Administrator Backend - An area needs to be created to allow Administrators to:

- Manage Users
- View Metrics
 - Signups
 - LinQs
 - Engagement
 - Time On Site
 - Login Frequency
 - Tags
 - Projects
 - Users By Type
- Handle Support Requests

SCENARIOS

1. An administrator checks metrics on a daily basis. An administrator can view and search for new signups, new LinQs, time on site, engagement, login frequency, tags, projects, and look at users and user counts by type of users quickly and easily through reporting mechanisms on the admin system.
2. An administrator can manage users, including making updates a user's email address, password, or other information on a user's profile. An administrator can delete users or adjust user profiles.

An administrator will only be able to reset passwords, but will never have the ability to read a user's password in plain-text for security purposes.

3. An administrator can manage support requests through the system by responding to users in a ticket-based system on any issues they find within the site.

SPECIFIC EXAMPLES

1. Independent Researcher A makes a support request to Administrator B asking for help in resetting their password. Administrator B logs into the Administrator Backend and sees the support request. He or she then goes to the Users section of the Administrator Backend and resets Independent Researcher A's password. Administrator B responds to the support request in the Administrator Backend that they have reset Independent Researcher A's password and closes the support request.
2. Administrator C is responsible for marketing and logs in daily to check Signups on the platform. Based upon users with a type of Independent Researcher having slowed down, Administrator C launches an external marketing email campaign to increase the number of signups.

NOTES

An Administrator will have varying levels of permissions that are or are not available to them. There will be one "super-administrator" that has access to the highest level of access that can then create additional Administrators within the system. Special types of Administrators (marketing, sales, customer service) can be created within the system by restricting or enabling permissions to specific aspects of the Administrator Backend.

FUNCTIONAL REQUIREMENTS

1. An administrator backend area will be created to allow an administrator to administer the platform. This script should:
 - a. Allow for an administrator to manage users
 - b. Allow for a user to view metrics, including:
 - i. Signups
 - ii. LinQs
 - iii. Engagement
 1. Time On Site
 2. Login Frequency
 - iv. Tags
 - v. Projects
 - vi. Users By Type

WORK SCHEDULE

ITEM	DESCRIPTION	HOURS
Admin Backend	Area for Administrators	80
Total		80

VSRI PUBLIC SITE

OBJECTIVE

Content pages need to be created outside of the main system to entice users to join, including:

- Home
- Contact
- Investor Relations
- Privacy Policy
- Terms and Conditions
- How it Works
- Support
- Signup

USERS

Public Users: users that do not have an account and have not signed up who are enticed to sign up by external content pages

SCOPE

Content pages need to be created outside of the main system to entice users to join, including:

- Home
- Contact
- Investor Relations
- Privacy Policy
- Terms and Conditions
- How it Works
- Support
- Signup

SCENARIOS

1. A potential user browses the content pages on the public site and clicks Signup to signup for the system.
2. A potential investor browses the investor relations and views the contact information of the company. The user clicks on the telephone link.

SPECIFIC EXAMPLES

1. A potential user browses the content pages on the public site and clicks Signup to signup for the system.
2. A potential investor browses the investor relations and views the contact information of the company. The user clicks on the telephone link.

NOTES

More content pages can be added to the system as desired in the specification phase. The primary resource allocation required for content pages is, in general, design after the initial coding has been completed.

FUNCTIONAL REQUIREMENTS

1. A public site should be created for the general public viewing information about the platform. This site should:
 - a. Home
 - b. Contact
 - c. Investor Relations
 - d. Privacy Policy
 - e. Terms and Conditions
 - f. How it Works
 - g. Support
 - h. Signup

WORK SCHEDULE

ITEM	DESCRIPTION	HOURS
Public Website	Site for the General Public	40
Total		40

VSRI SYSTEM

OBJECTIVE

A passive background system needs to be set up which will:

- Make passive recommendations to users for projects and other users that they should LinQ to
- Pass messages and chats to user email
- Index users and projects for quick searching and passive recommendations

USERS

Not Applicable

SCOPE

A passive background system needs to be set up which will:

- Make passive recommendations to users for projects and other users that they should LinQ to
- Pass messages and chats to user email
- Index users and projects for quick searching and passive recommendations

SCENARIOS

1. A background process runs an algorithmic check to recommend projects, users, and potential LinQs to other users on a periodic basis. This background process monitors responses to potential LinQs, users, and projects to iteratively improve in making better recommendations to users on the system.
2. A background process runs to handle messaging and message queuing to improve scalability for the system. Messages, chats, and emails will be delivered in as real-time a system as possible, but will be indexed and queued as appropriate as the system grows.
3. A background process will run that will index users and projects for quick searching and responsive recommendations on the platform. This index will need to be defined based upon the data points of the algorithm for performing the matching. The matches will need to be created, as much as possible, based upon the relevance to the user and the information gathered about their history and potential success of the match from a research specialty and industry category perspective.

What is shown to who will be a critical aspect of the platform. Though the system will never be fully complete based upon the enormous expected

variation in the dataset, the system will be created to allow for additional algorithmic learning and data points to be added to continue to improve the validity of the results that are shown.

SPECIFIC EXAMPLES

1. Industry Partner User A creates a profile with no projects. Based on his or her profile information, recommendations are made to the user by the System for projects and potential LinQs in the industry of the user identified in initial setup. He or she clicks to LinQ with the project and is sent notification when the LinQ request is accepted as read-only.
2. Independent Researcher B messages Institutional User C. The database is updated with the messaging entry, and the message is added to an email queue process to notify Institutional User C while respecting the messaging limits of the underlying server architecture selected.
3. The system has a successful marketing campaign adding 5,000 new users to the platform. Indexing Process D adds additional entries to the indexing profile to allow for the users to be passively linked, appear in search results, and contribute to the platform more regularly.

NOTES

The VSRI System will need to be developed in conjunction with the rest of the technological components. There will be emphasis in the initial phases placed on flexibility and appropriate indexing methodologies to achieve desired results. Data points will need to be continually refined and added over time, similar to other matching and indexing algorithms, including Google's search algorithm, Match.com's matching algorithm, etc.

FUNCTIONAL REQUIREMENTS

1. A passive recommendation engine will be created to recommend users that we should LinQ to. The engine should:
 - a. Match users to users
 - b. Match projects to users
 - c. Match services to users
2. A messaging queue will be created to send emails for the system. This queue should:
 - a. Make sure that emails are delivered.
 - b. Make sure that email volume is handled appropriately.
3. An indexing system will be created to index users, projects, and services. This indexing should:

- a. Make sure that relationships and data points are defined to allow for quick search.
- b. Make sure that the recommendation engine can quickly pull top results for its passive recommendations.
- c. Increase accuracy as more data is added to the platform.

WORK SCHEDULE

ITEM	DESCRIPTION	HOURS
Recommendation Engine	Passive engine for system recommendations	30
Indexing System	Indexing System	100
Messaging queue	Messaging queue for email and chat	30
Total		160

TOTAL HOURS

DELIVERABLE	HOURS
VRSI Independent Researcher Area	160
VRSI Institutional User Area	80
VRSI Industry Partner Area	80
VRSI Administrator Backend	80
VRSI Public Website	40
VRSI System	160
Total	600