Optional Bonus Tasks (<u>Tree Object Browser</u> and <u>Audio/Video Conferencing</u>) | <u>Draft Templates</u> | <u>Wireframes</u>

Javul.org Website Project Specification

General Scope of Work: This project involves developing a complex website.

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Main Tasks (Milestones)

I have the domain (javul.org, currently blank) and the <u>logo</u>. Your job includes the following items (not in any order):

Initial Tasks (easy)

- Create sub-domain en.javul.org where most of your work will be shown.
- Making server ready for database and email functions

Main Tasks

These are the main tasks of the website.

Functionality for editing and creating Units, Objectives, Tasks

Task Management System

Issue Reporting and Tracking

For each unit, a Forum, Wiki and Chat

Adding wiki features to above items (edits of Units, Objectives, Tasks, Issues)

Financial Features and Transactions

Item Categories/Specializations (create, edit)

Activity Tracking

Globally accessible information

<u>Tree Object Browser</u> (hierarchical database model) for browsing Units and Objectives.

Audio/video conferencing for each Unit

The items above are discussed below in more detail in this document.

- Misc Specifications for the above:
 - o Using available open-source solutions and integrating them into the website
 - o Unified login for all site pages and features
 - o Other tasks and functionalities as necessary and as defined in this document.

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Shared Code Management: If possible, manage all code development on a shared platform like Github. Let me know which code website you would like to use and I will create an account for it with a public repository.

Quality of programming and Server Setup: Please follow good programming practices. Use good variable names and use comments to explain the code as much as possible so anyone can work on it later.

Server setup and quality of programing must work together to produce a fast efficient website. Keep in mind that the website might grow and its traffic might increase so if the programing is done right, with some server upgrades, the website should be able to perform for high traffic too. Tools like caching and accelerators can be used.

Unified Logins: Once a user account has been created, it can be used on the whole website, on the various Unit forums and Unit wikis or other areas of the site.

Final Delivery: The final delivery will include all the code, a working website on its actual domain (javul.org) and the creation of the first Unit (Javul.org). As is the case for a Unit, it will have its own forum, wiki and text chat. An About page will have been created on the wiki.

About the Website

Examples of other sites: To help you understand the Javul website, I will first give some examples of websites where people come together to do tasks. Wikipedia is one example where

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editors from all over the world join efforts to work together on information about topics. Reddit.com is a website based entirely on what the community decides. Freelancer is a website where people post tasks and others complete them for money. Facebook.com is a website where people come together for online sharing. There are many examples in today's world where people from all over the world join a website and do various things together.

Purpose of the Javul website: The purpose of the Javul website is to help people from all over the world work together on problems and issues facing the world. The Javul website is basically a generic problem-solving and task management system that can be used for any situation. This system will be continuously improved over time.

The goal of the Javul website is to link together these three things: (1) Smart people with good ideas. (2) Hard working people willing to work and implement those ideas (3) Any available rewards/compensation or money awarded to both groups 1 and 2.

Problems to improve or solve: The basic aim of the Javul website is to give tools to people to help them work on complex problems. These are two important problems facing the world today:

- Corrupt, destructive, inefficient and self-serving government systems which do not work the way people want them to.
- Companies and organizations that offer products and services to people, and they
 ignore their customers and hold people hostage. For example when company X does
 not have any competition, they raise their prices against people's wishes or do not care
 about resolving issues. All extra profit goes to the corporate executives at the expense of
 the people.

There are many other kinds of problems in society.

Solutions: There are many solutions that Javul is aiming to initiate.

- Improving existing government systems, or creation of new, transparent, democratic, effective, efficient, cooperative, dynamic systems of local, state and national governments run by the people themselves.
- Improving existing or creating new companies and organizations providing products and services according to what people want.
- With the help of the internet, create a globally connected society that uses its resources for the advancement of humanity as a whole rather than wasting resources in wars, conflicts and other unnecessary and wasteful activities

The solutions might seem ambitious but the idea is that when intelligent people work together and have the right tools they can usually improve any situation. We are striving for improvement, not perfection.

Units \rightarrow Objectives \rightarrow Tasks

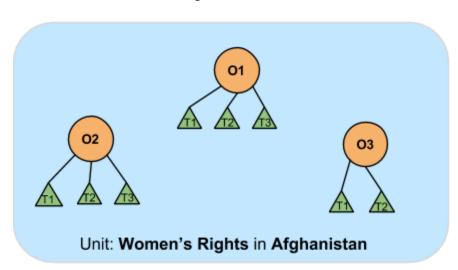
This is approximately how problems can be managed: People focus on specific areas called "Units". Anyone can create a Unit. For example "Women's Rights in Afghanistan" is a unit that can be created. People can create Objectives (or goals) that belong to those units. Each

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Objectives can have different tasks that need to be completed. When all the tasks of that objective are completed, the Objective can be marked as "complete". Every unit should have all the tools it needs for example its own Forum for discussions, its own Wiki where documentation and information resources can be developed. There is a 4th item type called "Issue" not shown in the diagram but it is explained later.

The Javul website will also have its own unit, where the purpose will be to improve the Javul website and the tools it provides to all other units on the website. Here is a basic diagram showing the relationship between Units, Objectives and Tasks:

Units, Objectives and Tasks



Units focus on certain areas or topics. Each Unit can have several Objectives which fall under the same unit. Each Objective can have assignable Tasks that need to be completed to meet that objective.

At this point if you like, you can quickly scroll down a few pages to see the section "<u>Draft Templates</u>" to get a basic *visual* idea of the main web pages and then continue reading.

Units

The home page of a Unit is meant to give all the important information about a unit. It tells the following things:

- What objectives, tasks and issues are associated with that unit.
- Recent activity on those tasks and objectives (in separate sections)
- Related Units.
- Any funds associated with that Unit (available amount and awarded amount)

Related Units: A user can specify if a Unit is related to other Units. They can search for the Unit they are looking for. Parent/Child Units can also be specified.

When a Unit is created, certain tools are created for its exclusive use for example a Forum, a wiki and text chat. These tools are mentioned later.

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Attributes (edit as needed):

- Unique ID
- Name of Unit
- Text Description
- Objective IDs (Objectives associated with this Unit)
- Task ID's (Tasks associated with this Unit)
- Issues ID's (Issues associated with this Unit)
- Unit Category (what kind of unit is this? See section below for detail)
- Unit Credibility (options: Platinum, Gold, Silver, Bronze)
- Unit Location (see section below for detail)
- State: Active, Disabled (changed by site admin)
- Funds available, funds awarded in lifetime, funds awarded in last 6 months.
- Related Units
- Parent/Child Units:
 - Parent's Unit ID (is this Unit a Child unit of a Parent unit)
 - Child Objectives (list all objectives for which this Unit is a parent)

Aspects of any page belonging to a Unit:

A Unit has many sub-pages beneath it:

- Its home page
- Any page of an Objective for that Unit
- Any page for a Task in that unit
- Any forum page, for that Unit's forum
- Any Wiki page, for that Unit's wiki

All pages belonging to a Unit need to have some Unit related links and information for example:

- Links: Objectives (page that shows Objectives for that Unit), Create objective, Tasks (show all tasks for that Unit), Create Task. Wiki. Forum. Recent Activity (showing activity in that Unit).
- Wiki links. This is a section of customizable links that go to various pages on the Unit's wiki
- Show info: Funds available in that Unit, Funds awarded.
- Number of Objectives (current)
- Number of Active Tasks (that have not been completed)

Objectives

This section talks about Objectives and what their home pages look like. The home page of an Objective is meant to give important information about it. It tells the following things:

- What tasks are associated with that objective
- Recent activity on those tasks

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- Parent and child objectives.
- Any funds associated with that Objective (available amount and awarded amount)
- Quick overview of the Unit for that Objective (unit name, type of unit, total funds available in the unit)

Parents/Child objectives

When an objective is created or edited, people can specify that another objective is its parent or child. There can be multiple child objectives but only one parent objective. People can search for objectives by keywords. By default, they can search by objectives belonging to the same Unit or the objective can belong to any unit on the site. For that they can browse to their Unit and find the objective they are looking for.

Attributes (edit as needed):

- Unique ID
- Title of Objective (180 char)
- Text Description (any length)
- Importance level (initially 1. Any user can add +1 to it)
- Unit ID (Objective belongs to which Unit?)
- Task ID's (Tasks associated with this Objective)
- Issues ID's (any Issues associated with this Objective)
- Status: In progress. Completed, Archived
- Funds available, funds awarded in lifetime
- Parent/Child Objectives:
 - Parent's Objective ID (is this Objective a Child objective of a Parent objective?)
 - Child Objectives (list all objectives for which this Objective is a parent)

Task Management

This section gives more information on the task management features of the website. Creating Units and top level Objectives is relatively easy compared to creating detailed viable tasks with specifications that have a real possibility of being completed in a satisfactory manner. Managing Tasks thus forms an important core function of the website and therefore the task management system has to be designed with care and detail.

Short Summary

Here's the short summary of how the task system works. It's a simple process that most people are familiar with.

A team of people work on creating and editing a task. After task editing is complete, people who are interested in completing the task can bid on it. After the bidding stage, the task is awarded to the chosen bidder and the work is completed by the bidder. The work is then evaluated for quality of work and the task reward (if any) is awarded.

Details of the task system are mentioned below.

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Task Information

A task can have certain attributes. The goal is to have a task defined well so all the important information is present. Here is a list of attributes for tasks. Required fields that must be filled out by the task creator are in **Bold** (there are only a few).

- 1. Basic Task Information
 - a. Name of Task (shown in website hyperlinks)
 - b. <u>Summary</u> (optional)
 - c. <u>Description</u> (longer text giving detail)
- 2. <u>Task Skills:</u> (to make it easy for people searching for tasks that require those skills). This data is derived from the same database (it will be described later as '<u>Job Skills</u>') that task workers use to list their job skills. A task can have multiple job skills associated with it.
- 3. <u>Action Items</u> (what needs to be done, presented in a quantifiable way). In bullet form. These items will also be tracked during task completion.
- 4. <u>Estimated Completion Time</u> (hours to months. Although the ideal target of a task completion time is from hours to days. Any longer and there's a probability that the task could be broken up into multiple tasks)
- 5. Reward or compensation: Monetary or points.
- 6. Other attributes:
 - a. Task ID: Every task has a unique task ID in the system.
 - b. Unit ID: Task belongs to which unit?
 - c. Objective ID Task belongs to which objective?
 - d. <u>Issue ID</u> (explained below in Issue Reporting section; there can be multiple Issue ID's for same task)
 - e. <u>Task Status</u> Task status. Explained in a section below.
 - f. <u>User ID of Task creator:</u> Person who created the task
 - g. <u>File Attachments</u> (safe file types only such as doc, docx, pdf, txt, jpg, png, ppt, pptx, etc)

Details on the above fields for task information structure:

<u>Name</u>: Short (200 characters). This field is used when a task is linked from Units or Objectives or other places. In other words, the text of the link will be the task Name.

Summary (optional): 1000 characters

Description (longer text giving detail). No limit (database limit is fine, such as 64kb)

<u>Task Skills</u>: These are hyper-linked categories, derived from the <u>Job Skills</u> table. For example, a person can create a task about "working in a hair salon" and the skills required may be: Haircutting, Customer service, Chemical Hair treatment.

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That is how the skills will be listed for that task, as 3 separate skills. The Skills database is talked about in detail later.

Action Items (optional)

Action items are items in list form. They break the task down into smaller pieces so the Task Worker knows what key points need to be worked on for the task to be completed. Action items help clarify the task further and make it easier for the Task Worker to see the main points of the task or get an overview of the task.

A Task editor just needs options to add, delete or edit an Action item.

When submitting a completed task, the task worker makes a checkmark next to each item so it shows they have completed that action item.

<u>Estimated Completion Time.</u> Hours to months (Task Creator selects a double digit number and also the unit of time for hours, days or months). Although the ideal target of a task completion time is from hours to days. Any longer and there's a probability that the task could be broken up into smaller tasks).

Reward or compensation: Monetary or points. Task creator can set the numerical amount and also select one of two choices (dropdowns) for the unit, which is: \$ or just 'points'.

Secondary attributes

Internal attributes (not shown to user but used by the software):

Task ID: A unique number for each task (auto-increment)

Unit ID: Task belongs to which unit?

Objective ID: Task belongs to which objective?

<u>Issue ID:</u> A task can be linked to multiple issues. Issue reporting is explained later in a section.

<u>User ID of Task creator:</u> This is the User ID of person who created the task. The task item will show the user's name and link to their profile (using their user ID). In a separate field, you can also store the username if you like (it will reduce database queries).

Task Status: Explained in a section below.

Attachments: The task editors can attach files (as many as needed. Or allow for 10). You can do this anyway but please dont show 10 empty slots (waste of space). It can just say "add attachment". People can add more attachments by clicking "add another attachment". File types should be all safe types, such as: doc, docx, pdf, jpg, bmp, png, xls, xlsx, etc.

Task Status

Tasks can be in any of these states:

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Task Status (#)	Explanation
Editable (1)	Anyone can edit the task and improve it.
Waiting for Approval (2)	Task cannot be edited anymore. It is now waiting to be approved for bidding.
Open for Bidding (3)	People can bid on it now.
Bid Selection (4)	Bidding period has ended. Waiting to assign to selected user.
Assigned (5)	Task is assigned to user.
In Progress (6)	Work in progress by the person to whom the task was assigned.
Work Evaluation (7)	User submits the completed task for evaluation.
Completed (8)	Task has been completed.
Cancelled (9)	Task was cancelled at some point e.g. it was later seen that it was not a valid or viable task or it was abandoned for some reason.

Anyone on the site can browse to a Unit's Objectives and create a task for that Unit. When a task is created, it will be in 'Editable' state.

A Unit Admin can change the state of a task in any way. As mentioned before, all actions on the site are logged so this action is also logged.

Process of Task management:

This section explains in more detail what happens during the task management process from start to finish.

- Task Creation: A user goes to a Unit or Objective, and clicks "Create Task". They are shown the task creation page where they can fill out all the fields for a task. They click the Submit button and task is created. The system automatically assigns it to the Unit and Objective for which the task was created. If no objective is selected, the system assigns "Miscellaneous Tasks".
 - <u>Forum thread created:</u> At the time a task is created, its forum entry for discussion is also created automatically. This is a thread dedicated to any discussion about that task. That forum discussion is displayed under the task description. This discussion is also available in the 'Tasks' section of the forum. An example of displaying the same forum content in two different page views can be seen <u>here</u> and <u>here</u>. The Forum section of the website is discussed separately in this document.
- Task Editing: Next people start editing the task and if they want to, they can leave comments in the forum thread. All edits are logged in the task history. This is similar to

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what happens in a wiki. These items are recorded: User who made the edit, time of edit, edit summary, links to old and new version of the task.

When people are working on a task, the task status is displayed like this:

"Task Status: Editable"

If a user has edited that task in the past, they will see the following instead:

"Task Status: Editable (Submit for Approval)"

"Submit for Approval" is a link for that user. If they click on that link, it means they are done editing the task and think its ready for the next stage. If they are the only editor of the task so far, the task status will change to 'Awaiting Approval'.

If there are more than one editors of the task, the situation is different. After a user clicks the status change, a seven day timer will start and they will see:

"Task Status: Editable (You changed this task status to "Awaiting Approval". Waiting for 2 other editors to do the same)" [2 is an example]

The other editors will see:

"Task Status: Editable (1 task editor submitted this task for Approval). Time left for editing: 7 days."

At the end of 7 days, the system changes the task status to Approval.

If all task editors change to the status to Approval, the status is updated.

The task cannot be edited any further when the status changes to Approval. Only the Unit Admin can edit the task or change its status. Again, these actions are logged.

- Approval: Editing is now closed. Other users on the site can review the task, check its
 various parameters and make sure they are acceptable. Parameters include the bid
 price, how clear the task description is and so on. Only after the task is approved, it is
 considered a valid task and people can bid on it and later, work on it.
- Task Bidding: The task has been approved and is now open for bidding. People who are interested in completing a task can 'bid' in such tasks. "Tasks for Bidding" is a link accessible on the website in various places (Unit Home page, Objectives page) When a user clicks on that link they are shown the list of tasks that are ready for bidding. The task Title is shown in a table and some other task information. When they click on the task's name, the link takes them to the bidding page. They can enter a comment, enter the amount of points or money they want for completing the task. "Bid now" is the link which submits their bid.

Tasks are bid for 7 days. Tasks that receive no bids, stay open for bidding. When the first bid is received, a timer for 7 days starts. At the end of the 7 days, the task status changes to "Awaiting assignment".

- **Awaiting Assignment:** The task is now waiting for other users to assign the task to one of the bidders. When the task is assigned the task status becomes ...
- **Assigned:** The user who got the task awarded, is asked to confirm that they accept the task. They have a "My Tasks" link which shows them information about the tasks they are involved in (for creating, editing, bidding, work in progress, completed etc). 'Assigned' shows them the tasks they have been assigned. When a task has been

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assigned, they are shown a prompt that asks them if they accept the assignment. If they do, the status is changed to:

- In Progress: The task worker starts working on the task. After they are done, they can attach files and write a comment explaining the task completion and change the status to:
- Completion Evaluation: Now the site's users can evaluate the task and decide on the
 quality of work done and the timeliness and release any funds reserved for the task. If
 the user thinks the task is complete, they can change the status to 'Completed.
 If they think it needs more work, they can change the status back to "assigned" for the
 same user. They will need to add a comment for why they made that status change.
- **Complete:** The task is completed.

Cancelled: The option to change a task from state X to "Cancelled" is available in the following situation. Task Worker to whom task was assigned, has the task "in progress" but can change the status to "cancelled". They will be asked to confirm the cancellation and will need to give a reason for this status change.

Rewards for Task creators

It is challenging to create well-defined viable tasks so it is important to reward those who work on creating and editing tasks. Some reward will be given before tasks are completed and a larger portion of reward will be given if a task is completed.

For these reasons it is in the best interests of the task creators to make tasks that can be completed. Rewards could be 10% of the task's completion award amount given separately. So if the task completer gets \$100, the task creator will get \$10. In case of multiple task editors, the task completer can decide how to split their reward depending on who contributed the most to the creation of the task.

Issue Reporting

Issue Reporting is a simple interface that is used to route customer/end-user concerns into a Unit. For example if there is a Unit that belongs to a certain car model, the users of the car can use a simple form to report an issue with the car. Information in issue reports can be used to create tasks or objectives depending on the accuracy of the report, the severity of the issue and how many people think the issue is important. Attributes for an issue report include:

- Unique ID
- Issue Title (180 chars)
- Issue description (text field of any length)
- File attachments (optional)
- Status (possible values: unverified, verified, resolved)
- Resolution (text field of any length)
- Importance (see below)
- Task IDs (optional)

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- Unit ID (Issue belongs to which Unit?)
- Task ID (optional). A task can be associated with this Issue.
- Objective ID (optional). Objective can be associated with this issue.

Usually the unit ID is selected automatically when possible. The Issue description is filled out by the user.

'Importance' is the number of votes received by the issue. For example a user can add to the importance level of an issue by clicking the +1 button. There is no -1 button. When an issue is created, its importance value is 1.

The 'Task ID' field shows that an issue can be related to a task. An Issue can be linked to multiple tasks and one task can link to multiple issues.

Resolution is a text area where people can enter the proposed resolution for the issue.

The Issue Reporting section is shown on a Unit's home page and it shows issues sorted by importance. We can also sort by date to show recent or old issues.

Links to "Add an Issue" are available on various places: A Unit home page, Objective or Task page.

Item Categories/Specializations

The four items below allow users of the site to maintain their database entries (creation, edits).

Unit Category

When a Unit is created, a category has to be attached to it so people know what kind of Unit it is. The category is a tree-structure like product categories on Ebay. For example here is a sample product category on Ebay:

```
Computers/Tablets & Networking > Drives, Storage &
Blank Media > Hard Drives (HDD, SSD & NAS) > Internal Hard Disk
Drives
```

The last category is the main category that is applicable but the sub-categories also apply and are used to organize the products. Users should be able to create and edit these categories. As in Ebay, each item has its own item ID (unique number). This makes database handling easier. When a user creates/deletes or edits a category, this action is placed in an approval que. Either the site admin, or two other users of the site need to agree with the action before it is accepted into the database.

The following is a suggestion for the database details of a Unit category item:

- Category ID (unique)
- Text (used to display the category on the website)
- Parent Category
- Status: Pending or approved.

A Unit can have multiple categories attached to it.

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Location Database

The Location database can be used for Units and for Users. Units can have a geographic location assigned to them. Users can also specify their own geographic locations that appear in their profile.

We want to design the Location interface so it's easy to find the location they are looking for. For example they could first be shown the list of countries. After they select a country, they can start narrowing down to state/ region/cities etc. You can start with all the countries in the world and their major cities. You can use any existing license-free/open source country and city database that you can find on the internet. One location called "Global" is available at the top of the list and then a list separator. We also want to show the top 10 most often used locations at the top and then the complete list of locations appears. The location database will also be tree based for example: World Region X (examples) \rightarrow Country Y \rightarrow City Z

Job Skills

Similar to the above, job skills also have a tree-like structure so its easier to browse them. They are used in various places on the site:

- Task description: A task can have several job skills associated with it. This means the person completing that task needs to have those skills.
- User profile (someone listing their job skills on the website)

Areas of Interest

'Areas of Interest' is a field that a user can use to tell people what areas they are interested in. These will appear on their user profiles. Like Jobs Skills, they can be created, edited and managed in a tree-like structure. A user can edit their 'areas of interest' by accessing this tree structure and adding any number of nodes from it. These nodes are then displayed on the user's profile.

Tools for each Unit

All Units have their own website features (forum, chat and wiki) so users working on those units can collaborate together. The links to these features are present on the Unit's home page. On any page belonging to a Unit whether its a task, objective, forum post, wiki page or chat,, the unit presence (for example name of Unit and unit type) will be visible. This will tell the visitor they are in the area belonging to that unit. There is a bonus task of audio/video conferencing tools for each unit.

Please investigate what open-source software can be used for these features. Use the best available free software and integrate it into the website.

Forum

Every Unit must have its own forum. This forum is created automatically at the time of the Unit creation. It will have its own forum section headings to organize the forum. All forums must have these four headers: Objectives, Tasks, Issues, Other Discussions. Unit Admins can make

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additional forum sections below them as needed. Forum threads for tasks are automatically created when a task is created. Forum posts should work like they do on reddit.com: Allow sorting by time (new, oldest posts) and also ranking. Like on reddit.com, each comment on the website should have an upvote/downvote button so a user can express support for it. Reddit.com's source code is public so you can use any part of it.

Text chat

Each Unit needs its own text chat feature. You can see the <u>bonus task of Audio/video</u> <u>conferencing</u> to see if there's a good existing open-source method for implementing text chat.

Wiki

Every Unit has its own Wiki. We need page editing, page linking, image embedding, page history and other functionality. You can borrow code from Mediawiki (prefered because of more advanced features) or use any other open-source wiki software's code. Reddit.com's source code also contains a wiki feature. I have some thoughts on creation of the wiki and forum. Let me know when you are ready and we can discuss this.

Databases for Wiki and Forum: It may be best to have one database for the wiki for the whole website and have separate columns for Unit ID. The other option is to have a separate DB for each Unit but this may result in too many databases. Similarly, it may be best to have one forum database for the whole website and add extra columns like Unit ID so we know which Unit a thread or reply belongs to. If you have better ideas please discuss with me.

Motivation

To make a good system that works in the long run, we have to look at how to motivate people for performing high-quality work on the website, providing feedback and compensating people for their work. All activities on the site, big and small are important and need to be rewarded appropriately. Here are a few kinds of the rewards that can be given:

- Activity Points: This is the most generic form of reward that is given for a wide range of
 activities on the site. They are given in detail below. They are displayed on a user's
 profile page.
- Feedback:
 - Provided for task completion. The 2 categories of feedback are: Quality of work, Timeliness. This is displayed in the user's profile page, and when they are placing a bid.
- Awards (chosen by users). Allow people to nominate others for awards (every 6 months). Awards are displayed on a user's profile page.
 - Leadership: Showing general leadership in taking initiatives and dealing with difficult situations (have monthly contests asking people to vote for who). The leadership award amount is split proportionally according to the votes received.

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No justification is needed for a vote and votes are only positive (no negative votes).

- Task Completion: People who show the best quality of work for task completion.
- Ingenuity: Vote for people who show a strong ability to be creative and think outside the box in a positive direction.
- Mediator/Facilitator: People who help resolve conflicts by helping others compromise or help others work together better.
- Accountability award: People who do high-quality accountability work.

We also want to keep statistics of all these things, e.g. Users with most activity points (lifetime and last 6 months), users with most awards and users with the best feedback.

Activity points should be tracked with the unit, for which they apply. For example a user can have 20 activity points in Unit 1, 50 points in Unit 2 and so on. On their user profile, the points are listed with the Unit for which they apply. A total of all activity points is also shown on their user profile.

In the next section we will see the kinds of work that is performed on the website and the activity points awarded for them by the system automatically when the activity is performed.

Kinds of work

There are many kinds of work on the website. Activity points are mentioned in **green** and the system automatically gives these points to the user:

- Task creating (+5), editing (+2) and deletion (+1)
- Task completion (+50)
- Accountability related work: Task approval (+2), bid selection (+3) and work evaluation
 (+5)
- Issue Reporting (verification (+2), classification (+1), editing (+1)), deletion (+1)
- Database maintenance:
 - Unit Category, Unit Location, Job Skills, Areas of Interest (add (+1), edit (+1))
- Units (Creation (+2), editing and deletion (+1))
- Objectives (Creation (+2), editing and deletion(+1))
- Wiki edits (+1)
- Forum comments: Comments get a +1 from the system by default. They can also receive a +1 from a user and they can also receive an **idea point**. Idea points are associated with a user and are displayed on their profile page. We also want to see user's on the site with the most idea points (lifetime and last 6 months). Idea points are also tracked according to the Unit they were created for. For example a User posts comments in a forum for Unit 1, and they get 5 idea points for those comments, we can say that for that user, idea points for Unit 1 are 5 and for Unit 2, they received 20 idea points.

Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes

Activity Tracking

Content Tracking

A user should be able to favourite or put on watch lists, the Units they are interested in. Every unit should have a favourite button (heart icon). When it's clicked, the Unit is added to the watch list. When they click on "Watched Units", they can see the recent activity in a unit. Similarly tasks, objectives and issues can also be tracked.

If a user does any activity on the site, all of it should be available in a link called "My activity". Activities can include all the things discussed above, such as creating, editing units, objectives, tasks, issues.

Logging of Site Activity

All activity is logged and recorded on the site according to the type of activity. For example:

- User X created/edited/deleted a unit/objective/task Y.
- <u>User X</u> <u>replied to <u>discussion Y</u>.</u>
- <u>User X</u> changed the status of <u>task Y</u> to Z (Z is from task_status in Tasks table)
- User X evaluated Task Y for Objective Z, in Unit ZZ.

We want as many hyperlinks as possible. Links are underlined in the example. For example User X can be linked to that user's profile. Task Y will link to the page for that task. "Replied" to will link to the individual reply while "discussion Y" will link to the thread in which that reply is located.

Database gueries of various kinds should be possible:

- Display all actions of a certain user (displayed on user's profile)
- Display all actions of a certain kind
- All actions done on a certain object (object can be a task, objective or unit)

Logs are sortable by date or other fields.

Wiki features

Like in a wiki, edits to tasks, objectives, units and issues should be saved so we can see what the previous version of the item was, date of the revision and user who made the change. Note that this is in addition to the <u>Wiki</u> that is provided to a Unit.

Financial Features and Transactions

This section explains the financial features and transactions on the site.

Money can be donated to Units, objectives, tasks, issues and users on the site. Donations are not anonymous by default but for any individual donation, a donating user can make the donation anonymous if they like. Money donated to a Unit can be used to finance objectives and tasks in that Unit. Similarly, money donated to objectives can be used to finance tasks under that objective. Money can be donated to users directly.

Optional Bonus Tasks (<u>Tree Object Browser</u> and <u>Audio/Video Conferencing</u>) | <u>Draft Templates</u> | <u>Wireframes</u>

Money donated into Units, objectives, tasks, issues and users can be displayed on their item home pages. For example when people click to see an Issue, they can also see the money donated into it. The home page of a unit will show how much money has been donated to it over the lifetime of the unit, and also how much is presently available.

Users can also donate to the General Javul account and let users decide where the money will go.

Please use a financial system that is stable, secure and uses the least fees possible. Let me know which system you suggest. It should be easy to switch to another payment processor. You can implement Paypal or any other system.

Home Page View

This is the home page of the site which will initially be empty but will be populated later. It is meant to show the summary of everything happening on the site. It will draw from various database tables. It displays the most recently created or edited units, objectives, tasks, contributors, activity log (all actions on site).

You can create some basic functions and it will be acceptable for example:

- Create a box for "Recently created Units" and use this kind of Query for that box: "Select 5 items from UNITS table and display their names and Unit type".
- In box titled "Recently created Objectives", display 5 more recent entries from the "Objectives" table.
- In box titled "Recent Tasks", display 5 more recent entries from the "Tasks" table.
- "Most recent users". Display the 5 most recent users who joined the site (usernames, and time elapsed since account creation)

If there is no data available for a table, you can just display "no entries found" for now.

Globally Accessible Information / Features

Global Site Statistics

The following site-wide information should be recorded in a database and displayed on all pages of the website at the bottom:

- Number of Users
- Users logged in
- Number of Units
- Number of Objectives
- Number of Tasks
- Total funds awarded
- Total funds available
- Total Forum Threads
- Total Forum Posts
- Total wiki edits

Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes

Other Site-wide Features

- 1. Every page will have a search box that searches the titles of Units, Tasks and Objectives for those keywords.
- 2. We can also browse all created Units by Unit Type or Location.
- 3. Create Account/Login (please use anti-spam for account creation)
- 4. Links for: Create a Unit | Objective | Task | Add an Issue | Forum Topic
- 5. "Report a concern" (small text, bottom of site, right hand corner) will be present on every page of the site and will go to a Webform, which then shows a "Concern regarding" and this field is the URL and page title of the previous page. There is a text field and the form is emailed to the site admin.
- 6. Information about Javul on every page:
 - An 'About' page will have been created on the Unit for Javul.org. That about page will be linked at the bottom of every page on the website.
 - o Also show the total amount of funds available in the unit of Javul.org

User Profiles

User profiles display the following information:

- Username
- Account age (creation date)
- Geographic <u>location</u> (optional)
- List by Unit:
 - Recent activity from that user (creation and edits of items on site, discussion comments etc)
 - Activity Points (lifetime and last 6 months).
 - Idea Points (lifetime and last 6 months)
 - Funds awarded (lifetime and last 6 months)
 - Awards won (type of award and date)
- Areas of Interest (user can edit these)
- <u>Job Skills</u> (user can edit these)

Optional Bonus Tasks (<u>Tree Object Browser</u> and <u>Audio/Video Conferencing</u>) | <u>Draft Templates</u> | <u>Wireframes</u>

List of Page Views / Functionality Tests

These are the various PHP/database views (or pages) that should be created. This list is just a suggestion. Some views may be missing from the list. If you think views should be added, deleted or changed, let me know.

This section also serves as a functionality test of the site.

User account

V-User1: Create User Account

V-User2: Login

V-User3: User can edit their User account properties (password, email)

V-User4: View my own user profile

V-User5: View another user's profile (non-logged in users can view any profile)

V-User6: View my list of Tracked Items (Favourited Units, Objects, Tasks and Issues)

V-User7: View status and activities from Tracked Items V-User8: Block user from Unit (Unit Admin, Site Admin)

V-User9: Block user globally from whole website (Site Admin).

Unit

V-U1: Create Unit

V-U2: View Unit Home page

V-U3: Edit Unit Home Page

V-U4: Delete Unit (Site Admin)

V-U5: Add Unit to Tracking List

Objective

V-O1: Create Objective

V-O2: View Objective

V-O3: Edit Objective

V-O4: Delete Objective (Unit Admin)

V-O5: Add Objective to Tracking list

Tasks

V-T1: Create Task

V-T2: View Task

V-T3: Edit Task

V-T4: Bid on Task

V-T5: Assign Task

V-T6: Accept Task assignment

V-T7: Submit Completed Task

V-T8: View Submitted Task

V-T9: Evaluate completed task.

V-T10: Accept Completed Task [money or points are awarded]

Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes

V-T11: Cancel (or abandon) assigned Task

V-T12: Add Task to Tracking list

Job Skills, Areas of Interest, Unit Category, Unit Location

Each of these 4 types of data have their own edit/create/delete views.

V-X1: Create new item

V-X2: Edit item V-X3: Delete item

Issue Reporting

V-I1: Create/Edit Issue V-I2: Delete Issue

Donate money:

V-D1: Donate to Unit

V-D2: Donate to Objective

V-D3: Donate to User

V-D5: Donate for General purpose

Forum:

V-F1: Create Forum Topic

V-F2: Create Reply to forum topic

(other typical views related to Forums)

There will be a light bulb for each forum comment so people can give that comment an idea point.

Wiki:

Various views for Wiki management (viewing and editing pages)

Misc Views

V-Home: Main home page of Website

V-Site Log: Logs for all actions on the site, according to category of actions.

Other Views as needed.

Optional Bonus Tasks (<u>Tree Object Browser</u> and <u>Audio/Video Conferencing</u>) | <u>Draft Templates</u> | <u>Wireframes</u>

Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes

Visual Aspects

Visual design guideline

The website should be efficient in space and should not have too much empty space or make the user scroll a lot. Our website has to be functional, informational and convenient. It should present as much information as possible in the same area, without being too crowded. Looking 'flashy' is not a goal.

Logo

You can use the logo on the left. FYI, it was created by a user on Freelancer.

Draft Templates

Below are <u>draft</u> layouts with placeholder text so the developers can know what the pages can roughly look like although these are just initial designs which are missing a lot of detail as they were made at an early stage of the project. The <u>final designs made by you will likely be very different.</u> The final designs will also depend on the text descriptions in the earlier part of this document that may have more information.

These draft designs were made by a 3rd party from <u>Wire Frames</u> that are shown at the end of the document. You can zoom in to see more detail. I can give you the HTML/CSS for these draft designs but I think you can create your own templates/designs as the draft designs are very basic. I am only including the main web pages. There are many other pageviews listed in the section "<u>List of Page Views</u>".

These designs were likely created from blog templates and have a lot of empty space. However at this stage these specific designs are not very important because nothing has been finalized. They were made just to give an idea.

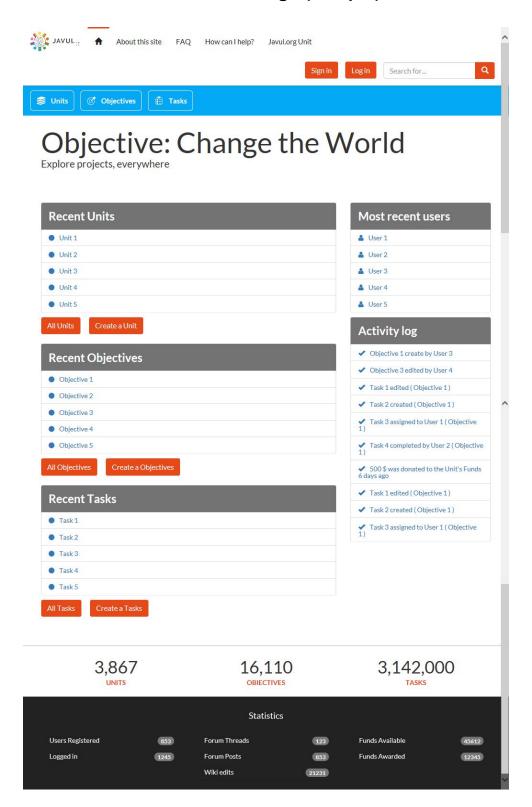
You can <u>edit these designs or create your own</u> according to the needs of the website you make. What you make can look completely different so there is no pressure on you to comply with the designs.

(screenshots on next page)



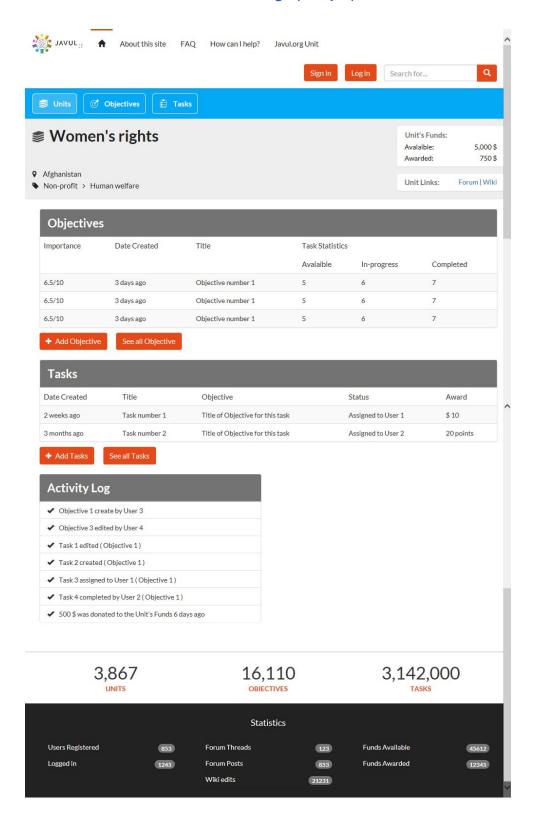
Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes

Main Home Page (sample)



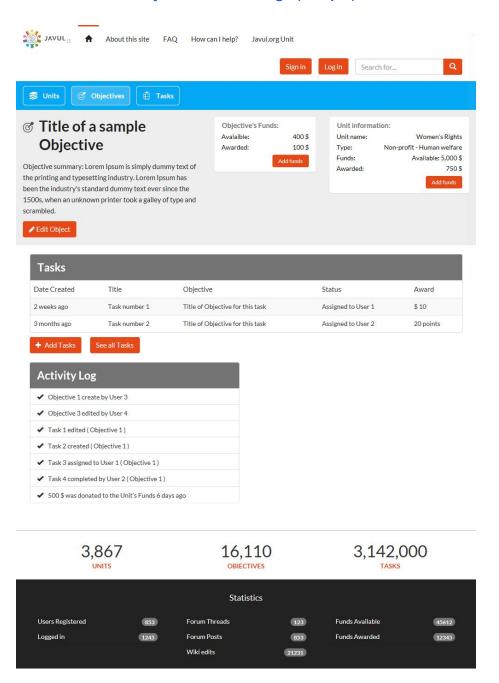
Optional Bonus Tasks (<u>Tree Object Browser</u> and <u>Audio/Video Conferencing</u>) | <u>Draft Templates</u> | <u>Wireframes</u>

Unit Home Page (sample)



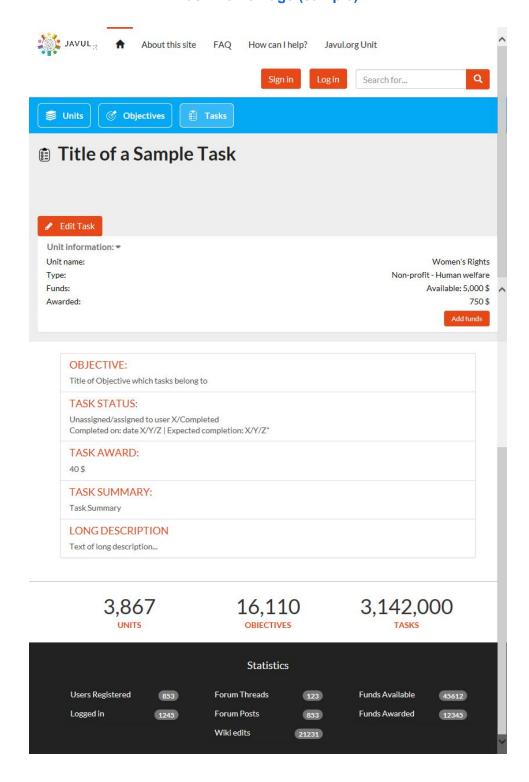
Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes

Objectives Home Page (sample)



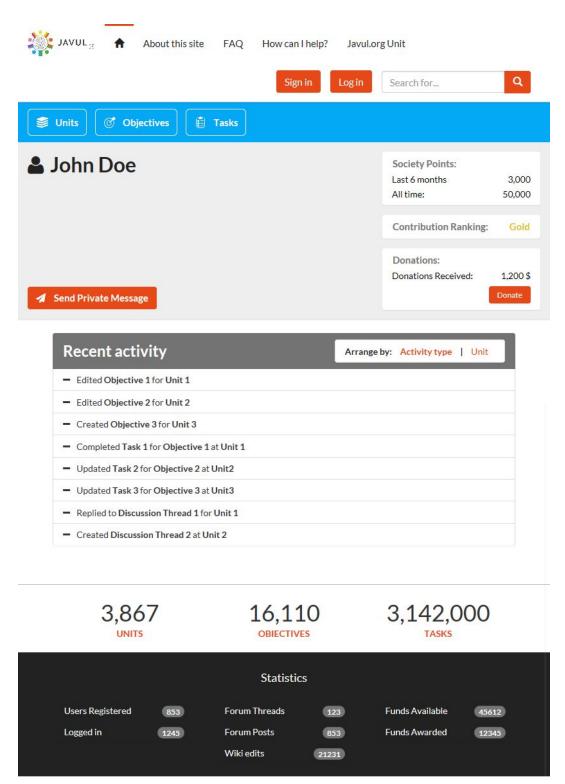
Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes

Task Home Page (sample)



Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes

User Profile (sample)



Optional Bonus Tasks (<u>Tree Object Browser</u> and <u>Audio/Video Conferencing</u>) | <u>Draft Templates</u> | <u>Wireframes</u>

Wireframes

If needed, these are wireframes that were used to make the <u>draft templates</u> for the website. These were created some time ago so some information may not up to date. This is just for giving a general idea.



SAMPLE UNIT HOME PAGE

Women's Rights

Location: Afghanistan

Unit Type: Non-profit - > Human welfare

Unit's Funds:

Available: \$5,000 Awarded: \$750

Unit Links: Forum | Wiki

Objectives (list first 10 Objectives, according to highest importance)

Importance	Date Created	Title	Task Star Available	tistics In-progress	Completed
6.5/10	3 days ago	Objective number 1	5	6	7
4/10	1 week ago	Objective number 2	3	4	5

Add Objective (link) | See all Objectives

Tasks (list first 10 tasks, according to their Objectives with highest importance)

Date Created	Title	Objective	Status	Award
2 weeks ago	Task number 1	Title of Objective for this task	Assigned to User 1	\$10
3 months ago	Task number 2	Title of Objective for this task	Completed by User 2	20 points

Add Task (link) | See All tasks

Activity Log

- Objective 1 created by User 3
- Objective 3 edited by User 4
- Task 1 updated (Objective 1)
- Task 2 created (Objective 2)
- Task 3 assigned to User 1 (Objective 3)
- Task 4 completed by User 2 (Objective 4)
- \$500 was donated to the Unit's Funds 6 days ago

Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes



SAMPLE OBJECTIVE HOME PAGE

Objective's Funds:

Available: \$400 | Add funds Awarded: \$100

Objective

Title of a sample Objective

(link to Edit Objective)

UNIT INFORMATION

Unit Name: Women's Rights in Afghanistan

Type: Non-profit -> Human welfare

Funds: Available: \$5,000; Awarded: \$750 | Add funds

Summary of objective: Objective Summary

Tasks

Date Created	Title	Status	Award
2 weeks ago	Task number 1	Assigned to User 1	\$10
3 months ago	Task number 2	Completed by User 2	20 points
4 months ago	Task number 3	Updated by User 3	\$30

Add Task (link)

Activity Log

- Objective description updated by user 1
- Objective summary edited by user 2
- Task 1 updated by user 1
- Task 2 created by user 2
- Task 3 completed by user 3

Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes



SAMPLE TASKS HOME PAGE

Task

Title of Sample Task

UNIT INFORMATION

Unit Name: Women's Rights in Afghanistan

Type: Non-profit -> Human welfare

Funds: Available: \$5,000; Awarded: \$750 | Add funds

(Link to Edit Task)

Objective: Title of Objective which tasks belong to

Task Status: Unassigned/assigned to user X/Completed, etc.

(if not un-assigned then) Completed on: date X/Y/Z; Expected completion: X/Y/Z

Task Award: \$40

Task Summary: Task Summary

Long Description

Text of long description.....

Optional Bonus Tasks (Tree Object Browser and Audio/Video Conferencing) | Draft Templates | Wireframes

Wireframe: User profile





Send Private Message

Browse to Unit | Top Contributors

Society Points:

Last 6 months: 3,000 | All-time: 50,000

Contribution Ranking: Gold

Donations: Donate | Donations Received: \$1,200

Recent Activity

Arrange by: Activity Type | Unit

- Edited Objective 1 for Unit 1
- Edited Objective 2 for Unit 2
- Created Objective 3 for Unit 3
- Completed Task 1 for Objective 1 at Unit 1
- Updated Task 2 for Objective 2 at Unit 2
- Updated Task 3 for Objective 3 at Unit 3
- Replied to Discussion Thread 1 for Unit 1
- Created Discussion Thread 2 at Unit 2