**Specification Report - Updated 02/09/2016**

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**Customer Impact:** Currently the Division of Information Technology (DoIT) is using a work order system that is not tailored to their needs. The code for the work order system is not easy to modify, very poorly documented, and open source. This project will allow DoIT to design a work order system that is more tailored to their needs, and modify this project in the future to add or remove features as needed.

**Constraints:** We must use a specific framework and development kit (Groovy/Grails) to develop the web application. The department of Enterprise Applications within the Division of Information Technology will maintain the project once the project has been implemented by our team, so they have requested that we use the language they use for their web applications. We are also creating a product that will be replacing a system that is already in place, so we will need to ensure we do not remove functionality that the previous product provided.

**Supported Activity List (Acceptance Criteria)**:

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|  | User Story/Narrative | Acceptance Criteria |
| 1 | I am a technician that needs to create work order tickets so that work requests are tracked and managed correctly | 1. Cannot submit form without completing all mandatory fields. 2. Ability to assign the ticket to myself or another technician. 3. Ability to assign the ticket to a different department queue if different than my own. 4. Information from this form is stored in the database. 5. An email notification is sent to the patron informing them the ticket was created and giving them the ticketID and a link to the ticket so they can reference the ticket and reply if needed. 6. The ticket needs to be added to the department queue specified in the form. |
| 2 | I am a technician that needs to edit work order tickets so that I can make changes to existing work orders that have errors or need updated information. | 1. Cannot remove required information from the ticket. 2. Can only edit required information, leaving required fields empty is not allowed. |
| 3 | I am a technician that needs to reply to tickets so that I can keep track of communication between myself and the client and notify the client of updates on the repairs. | 1. Ability to upload files to the ticket replies so that I can send more information to the Patron. 2. When a reply is posted, the Patron needs to receive an email notification letting them know a reply has been added to the ticket. |
| 4 | I am a technician that needs to comment on tickets so that I can make technician notes and communicate with other technicians about important information on the ticket. | 1. Comments need to be hidden from the client. 2. Comments are only viewable from technicians, supervisors, and managers. 3. Ability to delete comments and edit comments is also needed. |
| 5 | I am a technician that needs to close work orders when I have completed the work order. | 1. To close a work order a reply must be made to the ticket updating the Patron why the ticket is being closed. 2. The Patron should receive a notification indicating that the ticket has been closed. |
| 6 | I am a technician that needs to reopen closed tickets if they were closed by mistake or they were not resolved or the problem has occured again. | 1. The Patron should receive a notification indicating that the ticket has been closed. |
| 7 | I am a technician that needs to assign work orders to other technicians or add work orders as unassigned to different department queues so that I can transfer ownership of the work order. | 1. When assigning to another department queue, it needs to automatically mark the ticket as unassigned. 2. When it is assigned to another technician, that new technician needs to be notified of the new ticket. |
| 8 | I am a technician that needs to search for tickets by first name and last name, email address, phone number, ticketID, or subject to find tickets that have been archived that I may need to reference, or to find tickets that are opened to view the status of the repair. | 1. Searching for a ticket displays all tickets that match that string for the field that was requested in descending order of recent activity. 2. Technician needs to be able to specify whether to search for open tickets, closed tickets, or both. |
| 9 | I am a technician that needs to be able to view all the tickets for my department queue and to filter this list to show only tickets that I have assigned to me. | 1. The default view is the department queue for that technician. 2. The technician can filter this list by showing only the tickets assigned to them. |
| 11 | I am a technician that needs to assign priorities to tickets to ensure high priority tickets are done in a timely manner. | 1. Tickets are created by default as normal priority by patrons. Only technicians are allowed to change the priority of a ticket to Low, Normal, High, Critical 2. Critical tickets must ‘stand out’ on the department queue so that all technicians know about the priority. |
| 17 | As a administrator, I need to be able to add or remove technicians from the system, or change users to different department queues. | 1. Administrators should have the ability to add, edit, remove users in the management section. |
| 18 | As a administrator, I need the ability to delete tickets in the rare circumstance that they may need to be deleted. | 1. Only administrators can delete tickets through the management section by specifying the ticketID, and confirming the deletion. |
| 19 | As a patron, I need to be able to create my own work order so that I can request help for issues that I have with my computer or phone. | 1. End clients are called Patrons in the company. 2. Patrons will have a basic form to fill out to create a ticket. 3. Patrons will not be able to set categories, assign the ticket to a specific technician, or assign tickets to specific departments. 4. Patrons tickets will automatically go the Help Desk department queue to be reviewed by a Help Desk technician and assigned to the appropriate department queue if necessary. |
| 20 | As a patron I need to be able to edit to add more information or to correct incorrect information, reply to a work order ticket to communicate with the technician assigned to my ticket, or close work orders that I have created if the issue has been resolved with the need of a technician | 1. When a patron closes a ticket, a notification needs to be sent to the technician who is assigned the ticket, if applicable. 2. When a patron edits or replies to a ticket, a notification needs to be sent to the technician assigned to the ticket. |
| 21 | As a patron, I need to be able to search for my work order tickets or view all my work order tickets. | 1. When a patron logs in, they will see a view of all their recent tickets, with open tickets at the top of the page, and all closed tickets in order from most recent to oldest. |

**Solution Strategies:**

S1) We will have a default view for all users.

S2) The navigation bar will have the functions available for the group the user is in.

S3) The frame area will show tickets that the user has access to.

S4) When a form is requested, it will update the frame area with the form requested.

S6) This will be a single web page that updates the frame area using the grails framework.

S7) We will be using the built in database function of the grails framework when creating forms.

S8) We will be using the University Unify system for user authentication by utilizing a CAS plugin available for the Grails framework.

S9) When an administrator wants to add a technician, the technician must log into the system first using their Unify username and password. Then the administrator can add them as a technician in a department queue.

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However, for this project, Georgia College will be given the Intellectual Property rights to the source code for this project.

**Signatures**

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Alexander Heavner, Group Member

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Matt Gaines, Group Member

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Daniel Dingess, Group Member

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Will Smith, Client