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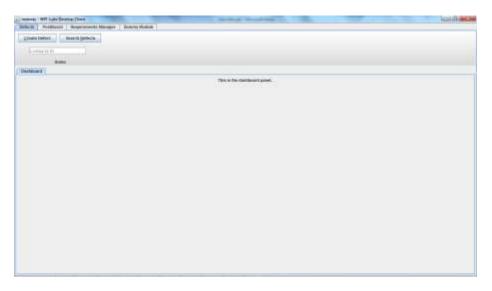
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Overview

Setting Up Your Development Environment

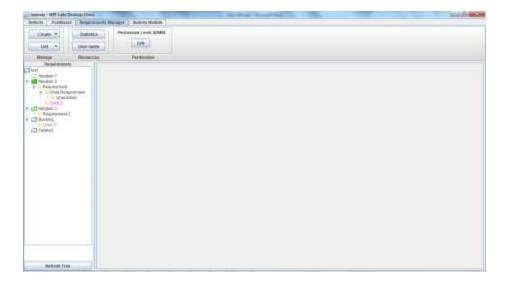
Running WPI Suite TNG Locally

Now that you have logged into Janeway, this is the screen that you should see:



To get to the requirements manager, click on the third tab titled "Requirements Manager".

Now that you are in the requirements manager, you should see the following screen:



User Interface

Top Toolbar



Create Button: Opens a create requirement tab by default. If the drop down arrow is used, requirement or iteration will appear. Whichever is chosen opens in a new tab.

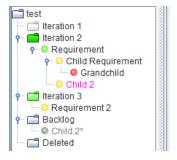
List Button: Opens a requirement list view by default. If the drop down arrow is used, requirement or iteration will appear. Whichever is chosen opens in a new tab.

Statistics Button: Opens up statistics view.

User Guide Button: Opens the user manual pdf file on the server.

Edit Button: Opens up the editing user permissions view.

Tree View



Components

Project Folder: The top folder that is shown in the tree view is the project name. The project is created in the admin console and is specified when logging into Janeway.

Iteration Folders: The iterations folders are all of the iterations that have been created. The backlog and deleted are created by default. Double clicking on these folders will open the edit view. The color of iterations, other than the backlog and deleted, shows whether it is in the past, present, or future. Light green means the iteration is in the past, a bright green means that the iteration is currently in progress, and a dark green means that the iteration is in the future. The iterations are in order from earliest to latest start date.

Requirements: Each requirement has a priority, low, medium, high, or no priority. Low priority requirements have a green icon next to their names, medium priority requirements have yellow icons next to their names, high priority requirements have red icons next to their names, and no priority icons have a white icon next to their names. A medium priority is given to requirement by default.

Child Requirements: Requirements can have child requirements, and even child requirements can have child requirements. This is shown hierarchically beneath each requirement. Since child requirements and requirements can be in different iterations, if a requirement or child requirement has sub requirements that are not in the same iteration, the name of the child requirement(s) will appear in a purple color. If a child requirement has a parent that is in a different iteration, the child requirement will have an asterisk at the end of its name to show that it is a child requirement.

How to Interact with the Tree View

Double click: Double clicking on any requirement or iteration will open up the edit view for that particular requirement or iteration.

Drag and Drop: Dragging and dropping in the tree is enabled, however some restrictions to help the user are put in place.

These restrictions are:

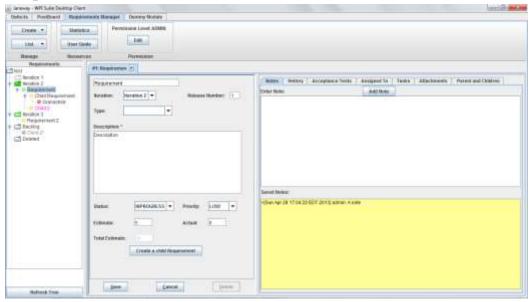
- Only requirements are draggable.
- Only requirements, iterations and the backlog can be dropped on.
- A requirement cannot be dragged to an iteration whose end date is later than its parent requirement's iteration end date.
- A requirement cannot be dragged when it is opened in a tab.
- A requirement/iteration cannot be dropped on when it is opened in a tab.
- A requirement cannot be dropped on its children/parents/itself.
- A requirement cannot be dragged if the estimated effort if 0.
- A requirement cannot be dropped on a past iteration.
- If the user changes something in the list views, the drag and drop will be completely disabled until the user save the changes.
- None users can't do drag and drop.

The status bar at the bottom of the tree view tells the user why a drag/drop is disabled. The user can hover on the tree view to get tooltips on things like "Requirement XX is in Iteration XX", "Requirement XX's parent is in Iteration XX". The user is also able to hold down the ctrl key and click multiple requirements at a time to move.

Editing

If any edits are made before saving changes when creating or editing requirements and iterations, a yellow highlight is shown in the background of the field or elements. If valid edits are made before saving changes when editing requirements in the table, the background of the cell will turn yellow. If invalid edits are made before saving changes when editing requirements in the table, the background of the cell will turn red.

Requirements



Main Fields

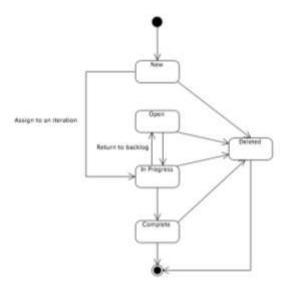
Name: The name of the requirement. This is a required field in order to create a requirement, and it must not be over 100 characters long.

Release Number: The release number of the requirement. Not a required field.

Type: The type of the requirement, including epic, theme, user story, non functional and scenario. Not a required field.

Iteration: The iteration of the requirement. Set to backlog by default. An estimate must be given for this field to be enabled.

Description: The description of the requirement. This is a required field.



Status: The status of the requirement. The status can be set to open, new, in progress, complete, or deleted. Deleted should be able to go back to Open and go to the Backlog. Completed should be able to go back to open and go to the backlog. Not a required field.

Estimate: The estimate of the requirement. Not a required field. This is required in order to move a requirement out of the backlog.

Total Estimate: The total estimate of the requirement and its sub requirements. This field only appears if a requirement has child requirements.

Actual Effort: The actual effort of the requirement. Not a required field.

Priority: The priority of the requirement. Not a required field. Can be no priority, high, medium, or low.

Notes



A note can be added by typing anything in the enter note box and clicking add note. The note will then appear under saved notes with the day and time it was created and the name of the creator.

History



A history of all the changes made to the requirement. The day and time are shown, as well as who made the changes. The original and changed values are included.

Acceptance Tests



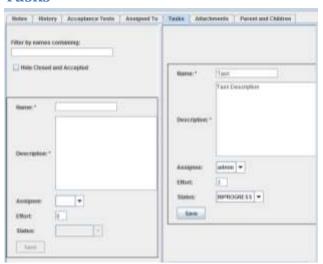
An acceptance test can be created by entering in a name and a description. Whether the test passed or failed can also be included. Clicking save will save this acceptance test and it will show up under the existing tests. To edit an acceptance test, just double click on it and it will show back up in the area in which it was created. The name will be not be editable however.

Assigned To



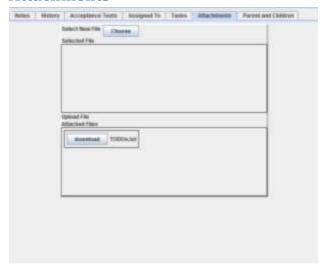
Assigned to shows the users in the project and if they are assigned to the current requirement. By clicking on a user, the user can be added or removed. To add or remove multiple users at once, just hold down the ctrl key and click on as many users as you want.

Tasks



A task has a name and description that are required. The other fields that can be included are assignee effort and status. To add the task, simply click save and it will show up with the existing tasks. To edit a task, double click on it and it will show up in the same area in which it was created. There is a check box that can also be used to hide closed and accepted tasks, so that the user only sees the tasks that still need to be completed. The tasks can also be filtered by name, which is case sensitive.

Attachments



Files can be uploaded by clicking the choose button and picking one from your file system. Clicking the upload button uploads the file and then it will show up in the existing requirements. The existing attachments can be opened as well.

Parent and Children



The name and id of any parent and child requirements that a requirement has are shown here.

Requirements Table



The requirements table lists the id, name, description, status, priority, estimate, iteration, assigned to, and parent id.

Sorting

The table can be sorted by clicking on the headings of the column of the table.

Editing



The table is editable by double clicking on the field and changing its value. To save these changes, the update button must be pressed. If you do not wish to save these changes, then the cancel button will undo them. The table also checks that the changes you are making are valid. If not, the cell will turn red, if it is, the cell will turn yellow. Update and none users are not able to edit the table.

Filters



The table can be filtered by clicking the show filters button and adding a filter. The filters can be enabled, disabled or removed by checking off which filters you wish to change in this way. The filters can be hidden again by clicking the hide filters button.

Iteration



Main Fields

Name: The name of the iteration. This is a required field.

Start Date: The start date of the iteration. This is a required field. The start date cannot overlap with another iteration that already exists.

End Date: The end date of the iteration. This is a required field. The end date cannot overlap with another iteration that already exists. The end date cannot be before the start date.

Estimate: The estimate of all of the requirements in the iteration.

List of Requirements in the Iteration



A table showing all of the requirements in the iteration is shown. The requirements can be opened from this table. The requirements can be sorted and filtered the same way as in the requirement table.

Iteration Table



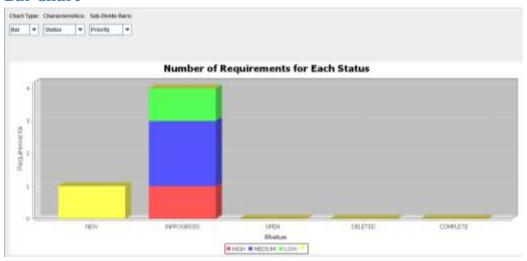
The iteration table lists the id, name, start date and end date.

Sorting

The table can be sorted by clicking on the headings of the column of the table.

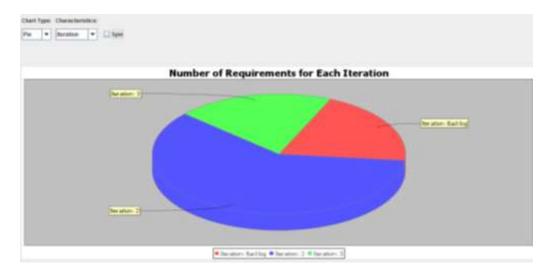
Statistics

Bar Chart



The bar chart shows all of the requirements with different characteristics and possible side bars. The possible characteristics include: status, iteration, and assignee. The possible side bars include: priority and type.

Pie Chart



The pie chart shows all of the requirements with different characteristics. The possible characteristic include: status, iteration, and assignee. The pie chart can spin if the checkbox is checked.

User Permissions



The possible user permissions that a user can have include admin, update, and none. To have different user permissions, you must log into Janeway with the user. This is described here: Running WPI Suite TNG Locally

Admin

An admin user has access to everything in the requirements manager and can update anything, including the user permissions of other users.

Update

An update user has access to update everything that that user is assigned to, but cannot change the user permissions of other users. An update user can drag and drop, but cannot edit requirements in the requirements table.

None

A none user can view everything but cannot update anything within the requirements manager. A none user cannot drag and drop or edit requirements in the requirements table.

Easter Egg

Snake

The Snake Easter egg is fun, but superfluous. If the customer wishes to modify the presence of Snake, they must modify the source. In order to disallow Janeway users from playing Snake, the function <code>showSnakeHuh()</code> must be modified. The last command of the function says <code>snakeButton.setVisible(show);</code> where <code>show</code> is a Boolean value. If <code>show</code> is false, then the button that takes users to snake will never appear. This function is located in the <code>FilterPanel</code> class under the filter package. The Snake game is well abstracted within the snake package, but it must be launched from other files.

In order to completely remove the Snake game from the Requirements Manager, the *MainTabController* must be modified. This class is located in the tabs.controller package. There is a function in the *MainTabController* called *addSnakeTab()*. This function will add the snake panel to the open tabs by creating a new *snake.GamePanel*. Removing this function, all references to it, and the snake package will remove the Snake game from the project. The only caveat to this is that there will be some left over classes to handle server communications for high scores. The *SnakeStore* class in the entitymanager package may be removed since it will no longer be used. Lastly, the entity store had to be registered with the *ManagerLayer* in the core. The line *map.put("requirementsmanagersnake", new SnakeStore(data))*; must be removed from the *ManagerLayer* class within the WPISuite.Java Resources.src package.

To add the Snake game back in, simple reverse the changes made to remove it in the first place.



Walkthroughs

For all of these walkthroughs, follow the overview instructions about how to get to the requirements manager.

Add a requirement

First, click the create button, or click the drop down arrow on the create button and then click on requirement. Next, type in a name and description at the very least. Other optional fields to enter values include iteration, release number, type, status, priority, estimate, and actual. If a field is disabled, you

can hover over the field name and the tooltip will explain why you cannot change the field. Then, either you can change the other elements, whose instructions are below, or you can click the save button.

Add a child requirement

First, double click in either the tree or table to open a requirement and click the "Add Child Requirement" button. Then, follow the same instructions as for adding a requirement.

Add a note

First, either create a requirement, or double click in either the tree or table to open a requirement. Next enter anything into the enter note box. Then, save the requirement and the note will be saved.

Add an acceptance test

First, either create a requirement, or double click in either the tree or table to open a requirement. Next, click on the tab in the right pane that says "Acceptance Tests". Enter in a title and description, and if you want to you can enter in a status. Then, click save and it will be staged, so that when you click save on the requirement, it will be saved.

Edit an acceptance test

First, double click in either the tree or table to open a requirement. Next, click on the tab in the right pane that says "Acceptance Tests". Click on the acceptance test you want to edit and it will appear where it was created. Edit the fields that you want to change. Then, click save and it will be staged, so that when you click save on the requirement, it will be saved.

Add an assignee

First, create a requirement or double click in either the tree or table to open a requirement. Next, click on the tab in the right pane that says "Assigned To". Click on the user you want to enter and click "Add". To add multiple users at once, hold down the ctrl key and click on as many users as you want to. Then, click save for the requirement to save the changes to assignees.

Remove an assignee

First, create a requirement or double click in either the tree or table to open a requirement. Next, click on the tab in the right pane that says "Assigned To". Click on the user you want to remove and click "Remove". To remove multiple users at once, hold down the ctrl key and click on as many users as you want to. Then, click save for the requirement to save the changes to assignees.

Add a task

First, create a requirement or double click in either the tree or table to open a requirement. Next, click on the tab in the right pane that says "Tasks". Enter at least a name and description for the task. Optional fields to enter include assignee, effort, and status. Then, click save, and the task will show up to the right. Click save for the requirement to save the changes.

Edit a task

First, create a requirement or double click in either the tree or table to open a requirement. Next, click on the tab in the right pane that says "Tasks". Click on a task that you wish to edit and change whatever

fields you wish to where you create a task. Then, click save, and the task will show up with the changes on the right. Click save for the requirement to save the changes.

Add an attachment

First, double click in either the tree or table to open a requirement. Next, click on the tab in the right pane that says "Attachments". Click the "Choose" button next to select a new file and a file chooser will open. Select a file and click the "Open" button. Then, click the "Upload" button and the attachment will be saved.

Open an attachment

First, double click in either the tree or table to open a requirement. Next, click on the tab in the right pane that says "Attachments". Click the "Download" button next to the file you wish to open.

Move a requirement to an iteration

First, either create a requirement or double click in either the tree or table to open a requirement. Next, give the requirement an estimate if it does not have one already. Then, select an iteration from the drop down menu and save the requirement. If a requirement already has an estimate, if can also be dragged and dropped into an iteration. If it is a child requirement, it cannot be moved to an iteration after its parent.

Add an iteration

To add an iteration, click on the create drop down arrow and select iteration. Enter a name and a start and end date. The start and end dates must not overlap with other iterations that have been created and the end date must be after the start date. Then, click save to save the iteration.

Edit a requirement

Editing requirements in the table

Editing several requirements is easy with the Requirements List. Clicking on the "List" button from the toolbar will take you to a list of all your requirements. The ID, Name, Description, Status, Priority, Estimate, Iteration, Assignee, and Parent ID are shown in this list. You may edit the Name, Description, Status, Priority, Estimate, and the Iteration of a requirement. To edit any of these fields, simply click on the field and either select or type the desired value. You will notice that once you click away from the edited cell, a few things will happen. First, the color of the cell will change indicating if the change you made is considered to be legal or not. If the color is yellow, then the change is valid. If the color is red, then the change is invalid. If there are invalid changes a red warning label will appear at the top of the table declaring errors. Hovering the mouse over invalid change cells will bring up a tooltip detailing why the change is invalid. You may either correct all their invalid changes, or cancel all changes. Canceling all changes will revert the list to the way it was. If and only if all the changes are valid, then you may click the "Update" button. This will save the changes. If there are any changed cells, then you may not edit the filters for the list. Once all the changes have been saved or cancelled, you may edit filters again. If there are any changes on the list, and you try to navigate to another tab, your changes will be lost. A pop-up message will prompt you if you are sure you want to leave and discard your changes.

Editing A Requirement in the Requirement View

To edit any requirement, double click on it in either the Tree View or List View. This will open up a special tab for the desired requirement. If there is already a tab open for the requirement, the tab will regain focus. Now you may edit any of the enabled fields within the requirement. If you edit a field, it will turn yellow to let you know you have changed the value. After you are happy with your changes, you may click the "save" button at the bottom of the panel to store your changes. You may also click the "cancel" button to discard changes. Clicking the "delete" button will remove the requirement and place it into the "Deleted" folder in the Tree View.

Editing A Requirement in the Tree View

Requirements appear in the Tree View on the left side of the Requirements Manager. Their icon color is determined by their priority. If a requirement has a "Low" priority, then the icon is green. If the status is "Medium", the color is yellow, and if the status is "High", the color is red. The requirement will appear under its assigned Iteration, unless it has not been assigned to an Iteration, in which case, the requirement will be under the "Backlog". If the requirement has been deleted, it will appear under the "Deleted" folder. Requirements may have parent requirements, and if they do, they will appear under their parent in the tree. You may change the Iteration of a requirement by dragging the requirement to a different folder. You may see an error message at the bottom of the Tree View. You will not be able to drop any requirements with an error. Fix the error, and then try again. You may also assign requirements to be children of other requirements by dragging a requirement into another requirement.

Edit an iteration

To edit an iteration, double click on the iteration in either the table or the tree. Then, edit any of the field that you wish to and then click save.

Show Statistics

To show statistics, click the statistics button. To view a bar chart, select bar under chart type and to view a pie chart, select pie under chart type. For a bar or pie chart, the characteristics drop down can be used to view the selected characteristic on the x axis. For a bar chart, you can show sub divide bars for certain characteristics. For a pie chart, there is spin check box that can be checked to see it spin.

View Permissions

Your current permission level is always viewable in the toolbar, in the "Permission" section. If you have a permission level of "ADMIN" you can edit requirements. To do this click on the "Edit" button in the permission section of the toolbar.

In order to change the permission level of a user:

- Click on the username of user whose permissions you want to change.
- To move to a permission level of "NONE" click "Move to None"
- To move to a permission level of "UPDATE" click "Move to Update"
- To move to a permission level of "ADMIN" click "Move to Admin"
- Once you have finished making editing permissions click on "Update Permissions" to save all changes.

If you don't want to save your changes, close the "Edit User Permissions" tab by clicking on the "X". You will be prompted to confirm that you want to close the tab.

Documentation

To access the javadocs, follow the server link and add /WPISuite/doc/ to the end of the URL, such as http://localhost:8080/WPISuite/doc/

Web Client

To access the login page of the web client, follow the server link and add /WPISuite/viewrequirements.html. For example, http://localhost:8080/WPISuite/viewrequirements.html

Login

To login, enter the username, password, and project that you use to login to Janeway. To get the requirements, click the "Get Requirements" button.

The screen should now look like this:

WPI Suite RM Requirements Viewer



Viewing a Requirement

To view a requirement, the link is the server name plus /WPISuite/singlerequirement.html#[id], in which the id is the id number of the requirement. For example,

http://localhost:8080/WPISuite/singlerequirement.html#1

Editing a Requirement

To edit a requirement, change the URL of the current single requirement you are viewing and change single to edit. For example, now the link to edit a requirement with an id of 1 is: http://localhost:8080/WPISuite/editrequirement.html#1

The fields can be changed and there is a button on the bottom called "Save" that needs to be clicked and then the requirements changes are saved.