

Assignment 1: Software Requirements Specification

Project Title: Flowchart Creator

Team: 6

Members:

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Requirements

Stakeholders	Requirements
Users/Client side	
	FR1. Users can create new flowcharts.
	FR2. Users can delete existing flowcharts.
	FR3. Users can add steps to an existing flowchart.
	FR4. Users can edit steps in an existing flowchart.
	FR5. Users can remove a step from an existing flowchart.
	FR6. Users can drag and drop steps to new locations in a flowchart.
	FR8. Users can use conditional statments in flowcharts.
	FR9. Users can use conditional loops in their flowcharts.
	FR13. Users can access saved copies of flowcharts while logged in.
	FR18. users can save flowcharts in different view styles by
	\hspace{5em} choosing from a list of templates
	FR19. Interface allows for keyboard shortcuts
	NFR5. Errors should not include relevant security information
	NFR6. keyboard commands allow user to save
	NFR8. Editor displays changes immediately
Server side	
	FR7. Users can export to XML/JSON formats.
	FR10. Users can create a personal account.
	FR11. Users can log in to their account.
	FR12. Users can freely delete their account.
	FR14. Flowcharts can be shared between multiple accounts.
	FR15. users can publish completed charts via publicly-accessible URL
	FR16. Users can recover forgotten passwords via email
	FR17. users can save charts as private, preventing them from
	\hspace{5em} being viewed or edited by other users
	NFR1. User passwords are securely stored with ISO/IEC 27034-1:2011
	NFR2. Server should be publicly accessible
	NFR3. Must be 100% operational with 99% uptime

Stakeholders	Requirements
	NFR4. all user input is validated
	NFR7. any new flowcharts or changes to existing flowcharts are
	\hspace{5em} saved as non-public drafts until published
	NFR9. When a user deletes their account, all associated data is also removed

Details

FR3. Users can add steps to an existing flowchart.

Goal: FR3. Users can add steps to an existing flowchart.

Steps can be added to the flowchart, and include a title, description, and type. Steps may be of conditional, loop, terminal, or non-terminal types.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR4. Users can edit steps in an existing flowchart.

Goal: FR4. Users can edit steps in an existing flowchart.

Once a step is created, it may be edited. Users can change the type, description, or title of the step at any time.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR6. Users can drag and drop steps to new locations in a flowchart.

Goal: FR6. Users can drag and drop steps to new locations in a flowchart.

Steps can be moved after creation by dragging them to a new location. Further prompts may be necessary, depending on the type of step being moved.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR7. Users can export to XML/JSON formats.

Goal: FR7. Users can export to XML/JSON formats.

Users will be able to export their flowchart in a portable, flat document format. The exact format will be decided on during development.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR8. Users can use conditional statments in flowcharts.

Goal: FR8. Users can use conditional statments in flowcharts.

All major flowchart features will be available. Conditional statements allow a step to have >1 options following it. Based on a given condition, users will be able to branch the flowchart into different options.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR9. Users can use conditional loops in their flowcharts.

Goal: FR9. Users can use conditional loops in their flowcharts.

FR9. Users can use conditional loops in their flowcharts.

Users will be able to state a condition and, if the condition is true, point back to a previous step. If the condition is false then the chart will point to a new step rather than a previous one.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR10. Users can create a personal account.

Goal: FR10. Users can create a personal account.

Users can create an account, locked by a designated username and password, to store any personal flowcharts. Using this, one user can have multiple flowcharts that they can view or edit.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR12. Users can freely delete their account.

Goal: FR12. Users can freely delete their account.

Should they choose to do so, users will be able to terminate their account. At this point the username associated with the account will become available for other prospective users and all flowcharts stored in that account will be deleted.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR14. Flowcharts can be shared between multiple accounts.

Goal: FR14. Flowcharts can be shared between multiple accounts.

Users can send copies of any flowchart in their account to a different account. This will allow multiple users to view or edit the same flowchart, allowing for easier collaboration between users.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR15. users can publish completed charts via publicly-accessible URL

Goal: FR15. users can publish completed charts via publicly-accessible URL

Users will have the option to publish a flowchart that they have access to. Should the user do this a website address will be given which can be shared to anyone the user wishes. Entering the address will allow you to view but not edit the flowchart.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR16. Users can recover forgotten passwords via email

Goal: FR16. Users can recover forgotten passwords via email

Through the web-interface, authenticated users can send a reset password link to their email if their account already exists from a reset passwords link. This will allow the user to reset their password if forgotten to a different password. The user must have access to the email account that they used to create their account.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR17. users can save charts as private, preventing them from being viewed or edited by other users

Goal: FR17. users can save charts as private, preventing them from being viewed or edited by other users

FR17. users can save charts as private, preventing them from being viewed or edited by other users

Through the flowchart interface, authenticated users can save their charts as private allowing no one but themselves to view or edit the flowchart. This option is not permanent and a user can set their flowchart to private or public at any time.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR13. Users can access saved copies of flowcharts while logged in.

Goal: FR13. Users can access saved copies of flowcharts while logged in.

Through the flowchart interface, authenticated users can open previously created flowcharts allowing them to edit the contents or options of the flowchart. Any changes made to existing flowcharts will overwrite those flowcharts.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR18. users can save flowcharts in different view styles by choosing from a list of templates

Goal: FR18. users can save flowcharts in different view styles by choosing from a list of templates

Through the flowchart interface, authenticated users can apply different visual templates to their flowchart changing the style. This cosmetic option can be changed as many times as the user would like. This option should only change the way in which the content is displayed, not the content itself.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

FR19. Interface allows for keyboard shortcuts

Goal: FR19. Interface allows for keyboard shortcuts

Through the web-interface, authenticated users can use keyboard shortcuts to perform different actions such as saving and exporting. These actions should override any pre-existing keyboard shortcut that may exist within the browser.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

NFR4. all user input is validated

Goal: NFR4. all user input is validated

We will perform input validation to minimize malformed data from entering the system.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

NFR5. Errors should not include relevant security information

Goal: NFR5. Errors should not include relevant security information

When a user tries to login if they enter their information incorrectly it will say username/password combination is incorrect rather than stating the username is incorrect or the password is incorrect.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

NFR7. any new flowcharts or changes to existing flowcharts are saved as non-public drafts until published

Goal: NFR7. any new flowcharts or changes to existing flowcharts are saved as non-public drafts until published

NFR7. any new flowcharts or changes to existing flowcharts are saved as non-public drafts until published

When a user saves a new flowchart or makes changes to an existing flowchart it is saved as a non-public draft until they decide to publish it.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

NFR8. Editor displays changes immediately

Goal: NFR8. Editor displays changes immediately

The editor window will display changes you make to the flowchart as soon as you make them.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017

NFR9. When a user deletes their account, all associated data is also removed

Goal: NFR9. When a user deletes their account, all associated data is also removed

When a user deletes their account all the data associated with that account will be removed. Allowing users to do this helps prevent hacking and lets the user have control over their data.

Origin: Requirements meeting on 1/20/2017

version: 1.0 Date: 2/1/2017