

# CS 435 User Stories - Flowchart Creator

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## 1 Create Flowchart

Implements FR1

### 1.1 Description

As a user, I want to be able to create a flowchart, so that I can map out my ideas.

### 1.2 Acceptance Criteria

Create a new flowchart can be done with a button or the ctrl-n keyboard shortcut

### 1.3 Priority

Must have

### 1.4 Time

Two weeks

## 2 Add A Step

Implements FR3

### 2.1 Description

As a user, I want to add a step so I can expand the flowchart

### 2.2 Acceptance Criteria

- Should be a 300x500px popup box
- There should be two buttons to add a step

- One on an existing step
- Another within the edit menu of an existing step
- Only one box can be added at a time
- Box should contain all necessary components for a step
- Upon adding the step, it is rendered on the chart with all the information supplied

### **2.3 Priority**

Must have

### **2.4 Time**

One week

## **3 delete existing flowcharts.**

Implements FR2.

### **3.1 Description**

As a user, I want to be able to delete my flowcharts.

### **3.2 Acceptance Criteria**

- Users can delete flowcharts from their account when logged in.
- User should be prompted with a confirmation window when deleting flowcharts.
- Should be a button on the page when they view their flowchart.

### **3.3 Priority**

Must have

### **3.4 Time**

One week

## **4 edit steps in an existing flowchart.**

Implements FR4.

### **4.1 Description**

As a user, I want to be able to edit existing steps in my flowchart.

## **4.2 Acceptance Criteria**

- Users can edit their flowcharts when logged in.
- Only one box can be edited at a time.
- Should be in a 300x500px popup box.
- Should be a button in the popup box.

## **4.3 Priority**

Must have

## **4.4 Time**

Two weeks

# **5 remove a step from an existing flowchart.**

Implements FR5.

## **5.1 Description**

As a user, I want to be able to remove steps in my flowchart.

## **5.2 Acceptance Criteria**

- Users can remove steps from their flowchart when logged in.
- Should be in a 300x500px popup box.
- Should be a button in the popup box.

## **5.3 Priority**

Must have

## **5.4 Time**

Two weeks

# **6 drag and drop steps to new locations in a flowchart.**

Implements FR6.

## **6.1 Description**

As a user, I want to be able to drag and drop steps in my flowchart.

## **6.2 Acceptance Criteria**

- Users can drag and drop steps to new locations in their flowchart when logged in.

## **6.3 Priority**

Could have

## **6.4 Time**

Two weeks

# **7 export to XML/JSON formats.**

Implements FR7.

## **7.1 Description**

As a user, I want to be able to export my flowcharts.

## **7.2 Acceptance Criteria**

- Users can export their flowcharts when logged in.
- Users can export their flowcharts in different formats.

## **7.3 Priority**

Must have

## **7.4 Time**

One week

# **8 use conditional statements in flowcharts.**

Implements FR8.

## **8.1 Description**

As a user, I want to be able to add conditional statements in my flowchart.

## **8.2 Acceptance Criteria**

- Users can add conditional statements in their flowcharts when logged in.
- Can add conditional statements through a popup box.

## **8.3 Priority**

Should have

## **8.4 Time**

One week

## **9 use conditional loops in their flowcharts.**

Implements FR9.

### **9.1 Description**

As a user, I want to be able to add conditional loops in my flowchart.

### **9.2 Acceptance Criteria**

- Users can add conditional loops in their flowcharts when logged in.
- Can add conditional loops through a popup box.

### **9.3 Priority**

Should have

## **9.4 Time**

One week

Implements FR10.

### **9.5 Description**

As a user, I want to create an account so that I may access the programs features.

### **9.6 Acceptance Criteria**

- should have text boxes for username, password, and e-mail
- should validate that username is available
- should validate that password is at least 6 characters
- should check for valid e-mail address
- username, email, and password should all be stored in database

### **9.7 Priority**

must have

## **9.8 Time**

2 weeks

## **10 log in to their account.**

Implements FR11.

### **10.1 Description**

As a user, I want to log in to my account so that I may access my personal flowcharts or create new ones.

### **10.2 Acceptance Criteria**

- should validate that both password and username were entered
- should check if username exists in database . if yes then check if password matches corresponding username
- if either username or password is incorrect an error should be displayed

### **10.3 Priority**

must have

### **10.4 Time**

1 week

## **11 freely delete their account.**

Implements FR12.

### **11.1 Description**

As a user, I want to delete my account and all charts contained in that account.

### **11.2 Acceptance Criteria**

- username, email, and password of account holder should be removed from database
- all charts connected to that account should be deleted from storage
- should prompt to make sure this is what the user wants to do

### **11.3 Priority**

should have

### **11.4 Time**

2 days

## **12 Flowcharts can be shared between multiple accounts.**

Implements FR14.

### **12.1 Description**

As a user, I want to share a flowchart across multiple accounts so that I may collaborate with other users on the same chart.

### **12.2 Acceptance Criteria**

- should not be able to share a chart if it has been marked as private
- link should be given that can be shared with other users to enable them to copy a chart to their own storage
- changes made in one account should be reflected in all other accounts with access to the same chart . this could be done similarly to a git pull

### **12.3 Priority**

should have

### **12.4 Time**

2 weeks

## **13 publish completed charts via publicly-accessible URL**

Implements FR15.

### **13.1 Description**

As a user, I want to publish my charts so that others can view them by entering the given URL.

### **13.2 Acceptance Criteria**

- A URL must be generated
- URL should be verified to be unique to a specific chart
- Entering the URL should take the user to a webpage that displays the published chart
- If a shared chart is deleted then that URL should be considered free for any other chart

### **13.3 Priority**

should have

### **13.4 Time**

1 week

## **14 recover forgotten passwords via email**

Implements FR16.

### **14.1 Description**

As a user, I want to be able to retrieve my password should I forget it so that I may still login to my account.

### **14.2 Acceptance Criteria**

- one button should be on login screen to request password
- should prompt for either the username or email of the account.
- should look up the given information and send an email with the accounts password to the corresponding email address given by the account holder
- if wrong information is given then an error should be displayed

### **14.3 Priority**

should have

### **14.4 Time**

1 week

## **15 save charts as private, preventing them from being viewed or edited by other users**

Implements FR17.

### **15.1 Description**

As a user, I want the option to specify my charts as private so that only I may view and edit them.

### **15.2 Acceptance Criteria**

- chart should include a flag that can be set to indicate that it is private
- private charts should not have the option to publish
- user can change chart to public or protected should the choose to
- if the creator of a shared chart decides to make it private all others who previously had access may lose the ability to view or edit the chart
- if a chart is shared then anyone who has access but is not the original creator should not be able to change the setting to private.



### **15.3 Priority**

should have

### **15.4 Time**

2 weeks

## **16 Access saved copies of flowcharts while logged in.**

Implements FR13.

### **16.1 Description**

As a user, I want to save flowcharts to my account.

### **16.2 Acceptance Criteria**

- Users can save flowcharts to their account when logged in.
- Users can access flowcharts that they have saved.
- Users can open flowcharts they have saved
- Users can edit flowcharts that they have saved

### **16.3 Priority**

Must have

### **16.4 Time**

Two weeks

## **17 Save flowcharts in different view styles by choosing from a list of templates**

Implements FR18.

### **17.1 Description**

As a user, I want to style my flowcharts in different ways depending on my use for them.

### **17.2 Acceptance Criteria**

- There should be an edit template button available in the flowchart's edit window
- When the "edit template" button is pressed, the user should see a list of templates to choose from.
- After choosing a template, changes should be reflected on the flowchart.

### **17.3 Priority**

Could have

### **17.4 Time**

4 days

## **18 User passwords are securely stored**

Implements NFR1.

### **18.1 Description**

As a user, I want to be sure that my passwords are safely stored without potential for compromise

### **18.2 Acceptance Criteria**

- User passwords are stored in a database
- User passwords are properly encrypted
- User passwords are properly salted
- Plain text passwords are nowhere to be found in the application

### **18.3 Priority**

Must have

### **18.4 Time**

One week

## **19 Server should be publicly accessible**

Implements NFR2.

### **19.1 Description**

As a user, I want to access the website

### **19.2 Acceptance Criteria**

- Application is hosted on a server with a public IP
- A domain name is set up to point to the public IP
- Typing in the domain name in a browser redirects to the application.

### **19.3 Priority**

Must have

### **19.4 Time**

One day

## **20 Must be 100% operational with 99% uptime**

Implements NFR3.

### **20.1 Description**

As a user, I want to be sure that the application will be available when I need it.

### **20.2 Acceptance Criteria**

- Server does not crash when under stress of <1000 users
- More users does not have any effect on application's operations
- If server does crash, notifications will be sent to the team immediately so that they can fix the problem
- Server implements proper caching to reduce stress

### **20.3 Priority**

Should have

### **20.4 Time**

One week

## **21 User Input Validation**

Implements NFR4.

### **21.1 Description**

As a user, I want my input to the website to be correct, because it will check for errors early and make working with the website easy.

### **21.2 Acceptance Criteria**

- User input to forms should be type checked.
- Common errors should be checked such as making sure an email address during registration contains an @email.com at the end.

### **21.3 Priority**

S

### **21.4 Time**

1 day

## **22 Errors should be informative**

Implements NFR5.

### **22.1 Description**

As a user, I want any error messages to display helpful information, because I don't want to think about where the error is only how to fix it.

### **22.2 Acceptance Criteria**

- Messages should be helpful and informative.
- No error messages should display any sensitive data.
- No error messages should supply users with more information than they need (such as saying "incorrect password" because that informs the user that the account is in the database).

### **22.3 Priority**

M

### **22.4 Time**

1 hour

## **23 Keyboard commands allow saving**

Implements NFR6.

### **23.1 Description**

As a user, I want to be able to use a keyboard macro such as ctrl+s to save, because it is very easy to do and allows me to save often.

### **23.2 Acceptance Criteria**

- The keyboard combination should override any browser-based keyboard macro.
- The keyboard combination should have high (> 90%) success rate or else display an error message immediately.

### **23.3 Priority**

S

### **23.4 Time**

6 hours

## **24 Creation or modification to a flowchart is saved as a non-public draft until publication**

Implements NFR7.

### **24.1 Description**

As a user, I want to be able to save my flowcharts to a draft, because I don't want everyone being able to see my changes as I make them.

### **24.2 Acceptance Criteria**

- Make a new, unique, draft for the flowchart edits.
- Any changes are saved to that draft rather than the published (public/private) version.
- Publication should overwrite the published version and remove the draft.

### **24.3 Priority**

S

### **24.4 Time**

6 hours

## **25 Editor displays changes immediately**

Implements NFR8.

### **25.1 Description**

As a user, I want to be able to see my modifications immediately after making them, because I want to see the finished product quickly and know if I need to make further changes to the flowchart element.

### **25.2 Acceptance Criteria**

- Any modification should be displayed on the main flowchart canvas after the user applies it.

### **25.3 Priority**

M

## **25.4 Time**

6 days

## **26 When a user deletes their account, all associated data is also removed**

Implements NFR9.

### **26.1 Description**

As a user, I want to be able to delete my account along with all my details, because I don't want my information persisting for others to see.

### **26.2 Acceptance Criteria**

- If a user opts to delete their account, ALL associated information should be removed. This includes any database reference as well as their created flowcharts.

### **26.3 Priority**

M

### **26.4 Time**

2 hours