435 Project 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

- Should not be able to create a chart with exact same name as an existing one

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
MICHAEL START HERE

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.

- Should remove all references to deleted chart from the database

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 so that I can plan a step with multiple possible outcomes.

8.2 Acceptance Criteria

- Users can add conditional statements in their flowcharts when logged in.

- Can add conditional statements through a popup box.

- Step should have at least two children branching off of it.

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 so that I can plan for a possibly repeated step.

9.2 Acceptance Criteria

- Users can add conditional loops in their flowcharts when logged in.

- Can add conditional loops through a popup box.

- Step should have one child and point back to a previous step.

9.3 Priority

Should have

9.4 Time

One week
    MICHAEL END HERE
    REID START HERE

10 Create Account.

Implements FR10.

10.1 Description

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

10.2 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

10.3 Priority

must have

10.4 Time

2 weeks

11 Log in to Their Account.

Implements FR11.

11.1 Description

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

11.2 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.

11.3 Priority

must have

11.4 Time

1 week

12 Freely Delete Their Account.

Implements FR12.

12.1 Description

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

12.2 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.

12.3 Priority

should have

12.4 Time

2 days

13 Flowcharts can be Shared Between Multiple Accounts.

Implements FR14.

13.1 Description

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

13.2 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.

13.3 Priority

should have

13.4 Time

2 weeks

14 Publish Completed Charts via Publicly-Accessible URL.

Implements FR15.

14.1 Description

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

14.2 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.

14.3 Priority

should have

14.4 Time

1 week

15 Recover Forgotten Passwords via Email

Implements FR16.

15.1 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.

15.2 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

15.3 Priority

should have

15.4 Time

1 week

16 Save Charts as Private, Preventing Them from Being Viewed or Edited by Other Users

Implements FR17.

16.1 Description

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

16.2 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.

16.3 Priority

should have

16.4 Time

4 weeks

17 Access Saved Copies of Flowcharts While Logged In.

Implements FR13.

17.1 Description

As a user, I want to save flowcharts to my account so that I may edit them later.

17.2 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.

17.3 Priority

Must have

17.4 Time

Two weeks

18 Save Flowcharts in Different View Styles by Choosing from a List of Templates

Implements FR18.

18.1 Description

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

18.2 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.

18.3 Priority

Could have

18.4 Time

4 days

19 User Passwords are Securely Stored

Implements NFR1.

19.1 Description

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

19.2 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.

19.3 Priority

Must have

19.4 Time

One week

20 Server Should be Publicly Accessible

Implements NFR2.

20.1 Description

As a user, I want to access the website

20.2 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.

20.3 Priority

Must have

20.4 Time

One day

21 Must be 100% Operational with 99% Uptime

Implements NFR3.

21.1 Description

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

21.2 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.

21.3 Priority

Should have

21.4 Time

One week

22 User Input Validation

Implements NFR4.

22.1 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.

22.2 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.

22.3 Priority

Should have

22.4 Time

1 day

23 Errors Should be Informative

Implements NFR5.

23.1 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.

23.2 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).

23.3 Priority

Must Have

23.4 Time

1 hour

24 Keyboard Commands Allow Saving

Implements NFR6.

24.1 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.

24.2 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.

24.3 Priority

Should have

24.4 Time

6 hours

25 Creation or Modification to a Flowchart is Saved as a Non-public Draft Until Publication

Implements NFR7.

25.1 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.

25.2 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.

25.3 Priority

Should have

25.4 Time

6 hours

26 Editor Displays Changes Immediately

Implements NFR8.

26.1 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.

26.2 Acceptance Criteria

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

26.3 Priority

Must have

26.4 Time

6 days

27 When a User Deletes Their Account, all Associated Data is also Removed

Implements NFR9.

27.1 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.

27.2 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.

27.3 Priority

Must have

27.4 Time

2 hours