

READ ME

Here I will outline the features of the spreadsheet keeping in mind the requirements.

I first list the requirements as noted in the email send by Dr. Byrne and then I explain how the app fullfills the requirements.

Important note:

- **The additional options to delete it, download the spreadsheet as a csv file or graph the data present in the sheet become available after you save the data.**

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1. (Requirement as listed by Dr. Byrne) Greeting Page:
 - Allow users to login or register.

App:

- The home page of the application greets the user with a Get started button which redirects the user to the registration page.
- The first user to register a account will be registered as a administrator.

2. (Requirement as listed by Dr. Byrne) Registration Page:

- Contains a form that accepts the new user's email and password.
- Optionally a users full name can also be collected.
- The option to create an administrator account should not be available. The default administrator account should be set up by the application.
- All the pages, except the greeting page and registration page, should provide a common navigation area (perhaps at the top of the page) to switch between pages.

App:

- On the registration page the application accepts the user's email, password and full name.
- The first user to register a account will be registered as a administrator.
- A Navigation bar available.

3. (Requirement as listed by Dr. Byrne) User Account Page:

- This page allows the user to change their password, and other account details.

App:

- At the top right navigation bar. Clicking on Settings will redirect the user to the user information page. Here the user can change their password or delete the account.

4. (Requirement as listed by Dr. Byrne) Administrative Page (for user information)

- This page is only accessible to administrative uses.
- A list of all the users should be provided.
- For each user a form should be provided that allows the administrator to change password, to delete the user, and optionally change other details

App:

- If logged in from a administrator account, a admin console link is available at the navigation bar.
- This redirects the user to the admin console. Here the admin has the list of users available from which it can change their password or delete users.
- Admin also has a list of all the spreadsheets available.

5. (Requirement as listed by Dr. Byrne) Shared Spread Sheet Page:

- This is a directory of all the spread sheets that have been shared by all the users.
- An demonstrative user should see all the spread sheets.
- For each spread sheet in the list there should be a copy button that makes a copy of the spread. The copy will then appear in the user's list of spread sheets.
- Each shared spread sheet line should contain the name of the sheet, the users name, and the copy button.

App:

- By clicking on the Dashboard, in the navigation bar, the user is redirected to the dashboard where the user is given the option to create a new spreadsheet, view its own private spreadsheet or by clicking on the check shared sheets by others, the user can view shared spreadsheets.
- This page displays the spreadsheets shared by all the users. The user can click on the spreadsheet to view it.
- The spreadsheet icon contains the name of the sheet and the users name.
- Also through a drop down menu on the spreadsheet icon, a user is given the option to copy the spreadsheet to its own private list.

6. (Requirement as listed by Dr. Byrne) User Spread Sheet List Page:

- This page should provide a list of all the spread sheets belonged to the current users. For each spread sheet, its name (as a text input) and its sharing status should be provided.
- A button to change the sharing status should be provided.
- A button to delete the spread sheet should be provided.
- A button to change the name of the spread sheet should be provided.
- A button to edit the spread sheet should go the Edit Spread Sheet Page.
- This page should provide a form to create a new spread sheet.

- The new sheet should be displayed in the "Spread Sheet Edit Page".

App:

- By clicking on the Dashboard, in the navigation bar, the user is redirected to the dashboard where the user is given the option to create a new spreadsheet, view its own private spreadsheet or by clicking on the check shared sheets by others, the user can view shared spreadsheets.
- Under the "Your private spreadsheets:" section, the user can view its private sheets.
- The name of the spreadsheet is provided on the actual spreadsheet icon.
- Clicking on the spreadsheet icon will redirect the user to the spreadsheet edit page.
- By clicking on the drop down menu on the actual spreadsheet icon, the user can rename sheet, delete the sheet or change the status of the sheet to shared.

7. (Requirement as listed by Dr. Byrne) Spread Sheet Edit Page:

- This page could be combined with the "User Spread Sheet List Page".
- Buttons should be provided that allow the size of the spreadsheet to be changed by adding new row and columns, or deleting a row or column.
- The spread should be displayed with the current values loaded from the data base. Each cell can contain a string or a number.
- Each cell should be editable.
- A button should be provided to save the current spread sheet.
- A button to export the current spread sheet as a CSV document should be provide. A form to load the spread sheet from a CSV an file should be provided (loading from a CSV
- file can be implemented by deleting the contents of the current spread sheet and creating a new sheet from the CSV file).

App:

- By clicking on the Dashboard, in the navigation bar, the user is redirected to the dashboard where the user is given the option to create a new spreadsheet.
- This redirects the user to the spreadsheet edit page. Here a user can create a new spreadsheet.
- An empty spreadsheet is provided to the user to fill with data.

- The first column of the spreadsheet acts as an index for the rows, it is indexed numerically. Hovering over the indexed cells makes the arrow for the drop down menu visible.
- The drop down menu gives the user the option to delete the current row or add a row above or below it.
- The first row of the spreadsheet acts as an index for the columns, it is indexed alphabetically. Hovering over the indexed cells makes the arrow for the drop down menu visible.
- The drop down menu gives the user the option to delete the current column or add a column above or below it.
- After the user is done adding data to the spreadsheet, it can save the data by first naming it in the text input bar and if the user wants to save the spreadsheet as a shared spreadsheet with all the other users, it can check the checkbox and then click the save button
- Leaving the checkbox unchecked will save the spreadsheet as a private spreadsheet, only visible to the user in its dashboard.
- The user can view the saved spreadsheet by clicking on dashboard in the navigation bar. And then clicking on the actual spreadsheet will redirect the user to the edit spreadsheet page with the chosen spreadsheet displayed.
 - To load a csv file from the computer, the user can click on choose file button and select the appropriate file. After choosing the appropriate file, the user can click the set data button to display the csv file.
 - **After saving a spreadsheet, the user is given additional options to delete it, download the spreadsheet as a csv file or graph the data present in the sheet.**

8. (Requirement as listed by Dr. Byrne) Charting Page:

- This page should provide the ability to produce a chart from a spreadsheet or part of a spreadsheet (a selection of the rows and columns). The page should allow the type of chart to be selected and the spreadsheet to be charted.
- There should be three types of charts.
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App:

- On the Spreadsheet editing page after saving the spreadsheet, the user is given the option to chart the data by clicking the Graph it button.
- Clicking the button shows a chart modal with three different graphs.
- Alternatively, the user can graph a particular row or column by first saving the spreadsheet and then double clicking on the index cell of a row or column to select it followed by clicking the graph it button.

9. Additional Features

- An Administrator through the admin console which is available through the navigation bar can manage all the different spreadsheets. The administrator through a drop down menu available next to the spreadsheet's name can edit all the spreadsheets, can delete them or change their status.
- A print button for printing just the spreadsheet (preview of print page available through google chrome, when print button is clicked) has been added to edit spreadsheet page. It becomes available after the spreadsheet is saved. This print button prints the saved spreadsheet.
- Other than a pie graph, bar graph and line graph an additional graph has been added. A Radar, is an area graph which plots the data from the spreadsheet.
- A zoom in button on the edit spreadsheet page has also been added.