

Overall

ID	Requirement
1	Any email address that appears in any part of the system is saved in a history file in the system's saves

Introduction Screen

ID	Requirement
1	Software should always open up to this screen
2	Basis of every other screen as it contains a sidebar and empty area which will display every other screen instead of replacing the whole screen to allow instant access from one screen to another without the window changing shape automatically

Login Screen

ID	Requirement
1	Displays a list of email providers which when clicked should display a pop up from that provider to login with the corresponding email account
2	Display an option which when clicked should display a default login pop-up: 1. Contains an input box (with a correct label) to enter an email address 2. Contains an input box (with a correct label) to enter a password 3. Contains a login button which successfully logs the email into the system if the email address and password combination 4. Contains a cancel button which will just close the pop-up box without attempting a login
3	If a login is successful, the pop-up will close, and the account is added at the bottom of the list of accounts which is then automatically selected
4	For every logged in account, there should be a directory represented by a saved id (which is +1 the highest current user id starting from 0) in the system's saves which will store the saves for the user including a file with the user's login details

Create/Edit Email Screen

ID	Requirement
1	Contains a recipients input box where the intended recipients are entered, separated by comma
2	Contains a carbon copies input box where the intended carbon copy addresses are entered, separated by comma
3	Contains a blind carbon copies input box where the intended carbon copy addresses are entered, separated by comma
4	For the recipients, carbon copies or blind carbon copies input box, if there was text in the input box, it will show a list of possible emails the user could be typing by finding any emails in the saved history with that start with (but not fully match as this means there is no need to show this in the list) the current typed text. These emails in the list can be clicked which will convert the text in the corresponding input box into the text of the email address. This list will hide if not on focus on the input box and will display when on focus on the box
5	Contains a subject input box where the subject is intended to be entered
6	Contains a contents box: 1. Has space to input the intended content 2. Has toolbar at the bottom: a. Contains font style drop box which contains a list of fonts and when a font is selected, the highlighted text is changed to the selected font style b. Contains font size drop box which contains a list of font sizes and when a font is selected, the highlighted text is changed to the selected font size c. Contains a bold button which when clicked, if the highlighted text contains non-bolded text, will bold the entire highlighted text, otherwise will un-bold the entire highlighted text

	<ul style="list-style-type: none"> d. Contains an italic button which when clicked, if the highlighted text contains non-italic text, will italic the entire highlighted text, otherwise will un-italic the entire highlighted text e. Contains a strikethrough button which when clicked, if the highlighted text contains non-strikethrough text, will strikethrough the entire highlighted text, otherwise will un-strikethrough the entire highlighted text f. Contains a subscript button which when clicked, if the highlighted text contains non-subscripted text, will subscript the entire highlighted text, otherwise will un-subscript the entire highlighted text g. Contains a superscript button which when clicked, if the highlighted text contains non-superscripted text, will superscript the entire highlighted text, otherwise will un-superscript the entire highlighted text h. Contains an underline button which when clicked, if the highlighted text contains non-underlined text, will underline the entire highlighted text, otherwise will un-underline the entire highlighted text i. Contains a bullet point drop box which contains a list of types of bullet points and when a bullet point is selected, if the current line is not bullet pointed or doesn't use the same bullet, it becomes bullet pointed and a new lines from this line become bullet pointed, however if the current line does use the same bullet point, it removes the bullet point from the line and does not bullet point new lines from this line j. Contains a numbering drop box which contains a list of types of numbering and when a type of numbering is selected, if the current line is not numbered or doesn't use the same numbering, it becomes numbered and a new lines from this line become numbered, however if the current line does use the same numbering, it removes the numbering from the line and does not number new lines from this line
7	<p>Contains a tag box:</p> <ul style="list-style-type: none"> 1. Input box intended to input a tag name 2. Add tag button which if the tag name is acceptable, will add to the list of tags using the given tag name 3. Add list tag button which if the tag name is acceptable, will add to the list of tags using the given tag name as well as an identifier to show this is a list tag 4. List of added tags, each with an insert button and delete button along with a bullet point drop box for the list tags 5. Insert tag button will insert the given text "<!tagName!>" into the contents text, intended to be a template slot for a string value entered in the tag screen 6. Insert list tag button will insert the given text "<!tagName(List)!>" into the contents text, intended to be a template slot for a bullet point list of values entered in the tag screen 7. Bullet point drop box for each tag list will use the selected bullet point / numbering when replacing the template slots for that given tag list 8. Delete tag button will delete the tag and any already inserted tag slots in the contents will be ignored when replacing them in the tag screen
8	<p>Contains an attachment box:</p> <ul style="list-style-type: none"> 1. Select attachment button which will open a file explorer pop-up when you can select multiple files to be added to the file list if not already 2. List of selected file boxes where each file box contains a hyperlink of the attachment which has the text of the filename taking you to the location of the file on the file system, as well as a delete button to remove the given file from the selected attachments, also removing the file box from the list
9	<p>Send button that if there is at least one tag in the tag list that has an insert tag slot in the contents text area then it goes to the tag screen, otherwise it will send the email as the selected account as the sender with the given entered recipients, carbon copies, blind</p>

	carbon copies, subject, contents, and selected attachments and if it's a draft email, remove the email from the draft inbox
10	Draft button will put the email in the selected account's draft inbox with the given entered recipients, carbon copies, blind carbon copies, subject, contents, and selected attachments

Tags Screen

ID	Requirement
1	<p>Dropdown Box:</p> <ol style="list-style-type: none"> 1. Contains a list of all recipients, combining the same email addresses even if they appear in multiple recipient types 2. The current selected recipients are what the related tag inputs boxes are linked to 3. Changing the recipient will save the current tag values to the previous recipient and replace the input box values with the new recipient values if there are any
2	<p>Tag Boxes:</p> <ol style="list-style-type: none"> 1. Should be a tag box for each tag that was created that has a template slot put into the contents, displayed from top to bottom in order that they were created 2. Normal tags should have a label for the corresponding tag name as well as an input box 3. List tags: <ol style="list-style-type: none"> a. Should have a label for the corresponding tag name b. Should have a list tag value box for every value which contains an up button to move the value up the list (invisible if not possible), a down button to move the value down the list (invisible if not possible) and a delete button which will remove the value from the list (updating any arrow buttons for surrounding list tag value boxes if need to) c. Should have an add button to add a list tag value box to the bottom of the list of boxes (updating the arrow buttons for the above list tag value box if need to) d. Starts off with just one list tag value box
3	<p>Send button:</p> <ol style="list-style-type: none"> 1. Send button will send the email to each recipient separately with the given subject, given contents with its templates slot filled in with the given tag values, and the list of attachments, with the sender being the currently selected email 2. Send button will combine recipients together in one email if the given recipients have the same tag values filled in 3. If it's a draft email, the email is removed from the draft inbox
4	<p>Cancel button:</p> <ol style="list-style-type: none"> 1. Will go back to the create email screen with all the corresponding details filled into the given screen, including all recipient input boxes, contents, tags and attachments 2. When returning to this screen, any still existing email address and tags from the previous tag screen will have the corresponding values filled

Inbox Screen

ID	Requirement
1	Divided into another sidebar and a view whitespace
2	<p>Sidebar:</p> <ol style="list-style-type: none"> 1. List of emails in the selected account's selected inbox in descending order of date & time from top to bottom, making the sidebar 2. First displays corresponding locally stored emails then consistently connects to the email provider to until the screen is changed to constantly update, seeing what emails it needs to add to the list as well as emails that should be deleted 3. Any emails displayed should be saved locally to the corresponding inbox file in an inboxes directory found in the corresponding user's directory of saves. Each email should have its details saved including its sender, its recipients, its carbon copies, its blind carbon copies, its subject, its contents, its attachments, its received date, if its been read, and its server id

	<p>4. Email Box:</p> <ol style="list-style-type: none"> a. Email boxes should be selectable, and the selected email box will have it's given email's information displayed in the view space b. Each email box is divided into a vertical list of information and a vertical list of buttons c. Should display the email's received date & time at the top of the list of information d. Should display the sender's address underneath the date & time e. Should display a string of the recipient addresses, with an indicating label before it, underneath the date & time f. Should display a string of the carbon copy addresses, with an indicating label before it, underneath the recipient addresses g. Should display the subject, with an indicating label before it, underneath the carbon copy addresses h. Should display the first line of the contents underneath the carbon copy addresses i. Should display the number of attachments the email has underneath the contents j. A clicked unread email should be set to read k. Buttons should be an inbox specific button (other than for the sent screen) and then a delete button l. Spam button should be displayed for the default inbox and should move the given email from the default inbox to the spam inbox, removing the email box from the list of email boxes and deleting it from the local storage version of the inbox. There will be an attempt to signal this move to the email provider server and if unable to, a backlog of the spam move attempts will be stored m. Edit button should be displayed for the draft inbox and should open the create screen with the corresponding details of the email filled in including all the recipient types, subject, contents, and attachments. Tags will be created in the tag list based on any template slots found in the contents text, generated in the order that they appear in the text n. Not spam button should be displayed for the spam inbox and should move the given email from the spam inbox to the default inbox, removing the email box from the list of email boxes and deleting it from the local storage version of the inbox. There will be an attempt to signal this move to the email provider server and if unable to, a backlog of the not spam move attempts will be stored o. Restore button should be displayed for the bin inbox and should move the given email from the bin inbox to the default inbox, removing the email box from the list of email boxes and attempting to signal this move to the email provider server and if unable to, store a backlog of the restore attempts p. Delete button will delete the email from the inbox include in local storage then will attempt to delete from the email provider server and if unable to, will store a backlog delete attempts q. Backlog moves should be saved in a file containing a list of moves which is saved in the corresponding user's directory of saves r. Backlog moves can be sent once a connection has been established/re-established however will be removed once the program closes down so to not contradict changes made in future use of different email applications
3	<p>View Space</p> <ol style="list-style-type: none"> 1. Should display the information of the email box that is selected 2. Should display the email's received date & time at the top 3. Should display the sender's address underneath the date & time 4. Should display a string of the recipient addresses, with an indicating label before it, underneath the date & time

	<ol style="list-style-type: none"> 5. Should display a string of the carbon copy addresses, with an indicating label before it, underneath the recipient addresses 6. Should show the full contents 7. Attachment List <ol style="list-style-type: none"> a. Should show a list of file boxes based on each of the email's attachments where each file box contains a hyperlink of the attachment which has the text of the filename taking you to the location of the file on the file system b. Should have an appropriate indicating label
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Sidebar

ID	Requirement
1	<p>Account Menu (Top Half of Sidebar):</p> <ol style="list-style-type: none"> 1. Top of the menu displays the title of the menu 2. Contains a list of account buttons for every logged in account as well as a login button which takes you to the login screen 3. Account button displays the nickname of the email account and the email address of the email account 4. Left clicking an account button will set it as the current selected account for the selected options, first option being set as the account's default inbox screen 5. Right clicking an account button will open a context menu containing: <ol style="list-style-type: none"> a. Change Nickname option which when clicked, turns the nickname in the sidebar into an input box which you can change the name b. Logout option which when clicked, logs out the right clicked account (if currently on that selected account, the current screen goes to the introduction screen)
2	<p>Options Menu (Bottom Half of Sidebar):</p> <ol style="list-style-type: none"> 1. Contains an option to go to the create screen, default inbox screen, drafts inbox screen, drafts inbox screen, sent inbox screen, spam inbox screen and bin inbox screen 2. Cannot select an option when an account has not been selected