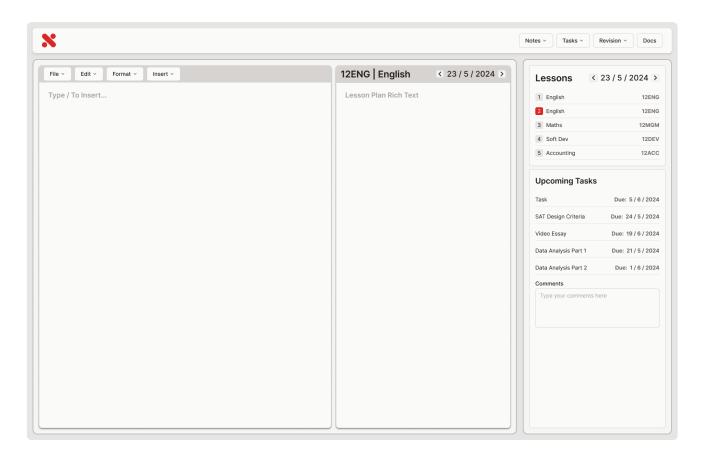
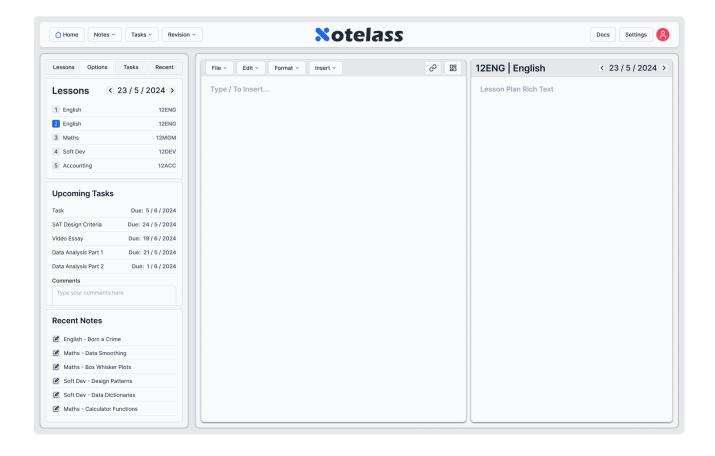
Design

Client Design Evaluation

Design 1



Design 2



Design Criteria Evaluation

Created from client meeting: Meeting Notes

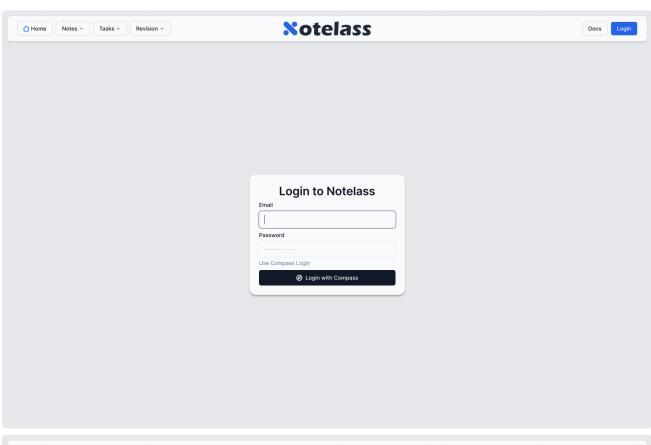
Description	Design 1	Design 2
Login page design is minimal and intuitive with simple compass login form	X	X
Documentation Page is accessible from the home page without login	X	X
Each page shares same navbar with intuitive navigation		X
All authenticated pages share sidebar with important information		X
Home page allows user to create, view and manage their notes	X	X
Editor allows users to write markdown or use familiar rich text formatting	X	X
Editor page shows side by side editor and lesson plan	X	X
App shares similar theme and branding to compass interface		X
App uses icons to represent functionality where applicable	Х	X
App interface shows all relevant data with minimal navigation		X
App is not excessively verbose or complex for users	X	X

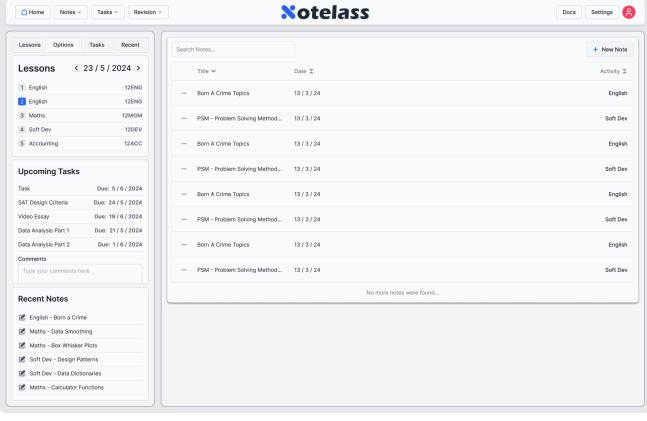
Justification

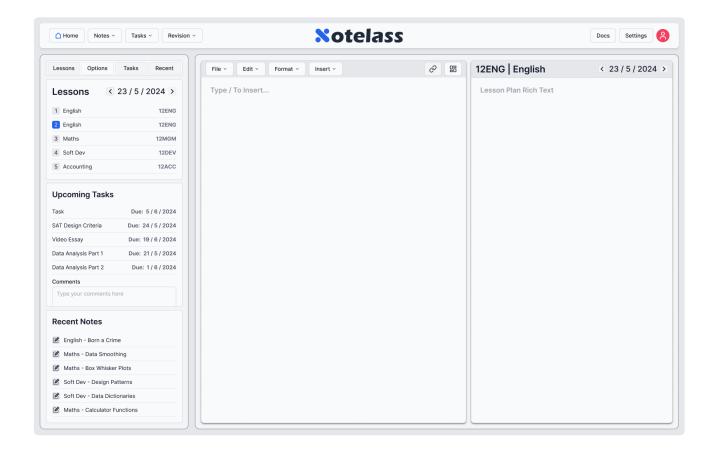
Design 2 best fits the criteria discussed with the client. It provides a simplistic and intuitive interface for users and maintains a theme stylistically similar to the Compass website it will integrate with. Compared to design 1, design 2 better provides the user with all useful information and navigation on the websites sidebar minimising context switching and allowing for efficient note taking with the application. The navigation bar of design 2 additionally provides separation between common and useful navigation buttons / dropdowns and less used navigation providing an intuitive experience.

Final Design

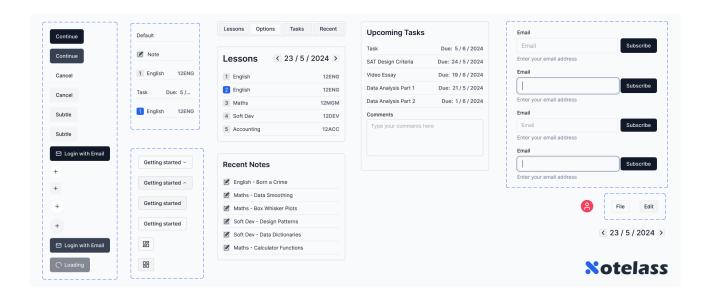
Mockup







Components



Data Dictionary



Compass API Documentation: https://idkfelix.github.io/compass.js

Pseudocode

```
BEGIN
        *Save note in compass database with metadata*
        FUNCTION saveNote({content, title, lessonId, activityId})
                 *Encode content to storable string*
                 encoded ← base64Encode(content)
                 *Make request to compass api with data to store*
                 response \leftarrow POST(compassAPI \rightarrow saveData, {
                         title,
                         encoded,
                         lessonId,
                         activityId,
                 })
                 *Return response note id*
                 RETURN response \rightarrow noteId
        END FUNCTION
        *Read note from compass to local client*
        FUNCTION readNote(noteId)
                 *Make request to compass api with note id*
                 response ← POST(compassAPI → readData, noteId)
                 *Extract data from response*
                 data \leftarrow response
                 *Convert encoded data to readable text*
                 content ← base64Decode(data → encoded)
                 *Return note content and metadata*
                 RETURN {
                         data \rightarrow title
```

```
content,
                          data \rightarrow lessonId,
                          data \rightarrow activityId,
        END FUNCTION
         *User inputs note title and content*
         localTitle ← INPUT note title
         localNote \leftarrow INPUT note markdown content
         *User selects lesson to link note to*
         lesson ← SELECT lesson from schedule
         *Save note to compass*
         noteId ← saveNote({
                 localTitle,
                 localNote,
                 lesson \rightarrow lessonId,
                 lesson \rightarrow activityId,
         })
         *Retrive note from compass for viewing and editing*
         noteData ← readNote(noteId)
END
```

Evaluation Criteria

Functional

ID	Requirement	Notes
FR1	User can login with Compass	Login page makes request to Compass to authenticate details and returns user details in a JWT for further requests
FR2	Only authenticated users can access tools and data	JWT verification on all routes to only be used by authenticated users
FR3	Unauthorised users can access documentation	Open route for viewing documentation that allows unauthenticated users
FR4	Requests to compass API are authorised	Compass API requests are properly authenticated with data from the JWT without errors
FR5	Functional note editor with markdown and LaTeX	WYSIWYG editor works seamlessly live rendering of markdown syntax / LaTeX formulas and loading / exporting to plain text

ID	Requirement	Notes	
FR6	Notes are stored in and retrieved from Compass	Exported notes are saved in Compass with appropriate metadata (subject, class and date) on the users account and all notes can be retrieved efficiently for viewing or further editing by the user	
FR7	Class resources can be viewed	Class lesson plan and resources are fetched from the compass API for viewing by the user when editing notes	
FR8	Notes can be filtered by subject, date and class	Notes overview page has filters for metadata that allows the user to refine displayed notes and search for subject, date and class	
FR9	User can view upcoming tasks from Compass	Learning tasks for the user are fetched from Compass and are displayed in a timeline in addition to user defined tasks.	
FR10	Documentation is dynamically rendered	Documentation statically stored in markdown files on the server is rendered and displayed with the notes editor in the documentation route	
FR11	Admin can optionally enable AI revision for users	As AI use requires a paid API key it should be be optionally enabled with environment variables, if disabled the routes and pages for revision tools will not be shown to users	

Non-Functional

ID	Requirement	Notes
NFR1	Intuitive Design	90% of users will be able to create and retrieve a note without any prior instruction
NFR2	Accessible Themes	Users should have at least 3 different interface themes to choose from when using the website.
NFR3	No downtime	The website should implement a CI/CD system with serverless hosting to allow for seamless version upgrades
NFR4	Backwards compatability	New versions of Notelass should not break the functionality of existing notes and should allow for continuous use
NFR5	Quick navigation	A user should not require more than 5 clicks to find any of their notes throughout the app