



Quiz App Part A - Design

Mobile Development with Android Assignment

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Designing the prototype

In order to produce a realistic, interactive prototype that would best reflect my ideas and ambitions for the development of this quiz app, I chose the design tool Figma. With its ability to utilise the Material 3 library through its design kit [1] and its easy application to developing Android app prototypes efficiently, this was a great choice for me despite my lack of experience prior. The use of Figma allowed me to conform to Material 3 design standards as closely as possible and implement my own colour scheme (using the Material Theme Builder extension [2]) much easier than I would do on another software due to the Material 3 library giving instant access the components Google has incorporated into all of their applications, such as text boxes and icons. This being said, there are some areas within the design where I had to create my own icons (which will be cited upon their corresponding design annotations in future sections of this document) and other uncommon Material 3 icons that Google has provided [3] but had to be gathered externally as they were not included within the Figma extension.

Throughout my design, I use multiple images for each page (for reasons I explain in the next sections). Having experience with digital art, some of these assets therefore are my own. However, a vast majority are royalty free images as I wished to prioritise the development of the prototype in a timely manner over original asset creation. Upon development, these assets will be illustrated/edited to be unique to the app but for now they provide a guideline to the tone and positioning of images within each screen. All of these assets will be sourced in the references.

The prototype

The prototype begins on a home screen, branching into four flows: Quiz (the quiz round, final score display and leaderboard, modelling the two kinds of question format which I will explain further in later sections), Create (a flow displaying the process of creating more questions for the quiz), Edit (a flow displaying the process of editing a question and/or its answers), and Settings (the final flow that models the potential accessibility settings the app will include). Furthermore, in some areas the app makes use of overlay screens, whether this is informal uses such as pause menus and saving confirmation notifications, or for potential error handling, such as if the user tries to add more than 10 answers to a question (or any other actions that go against the brief requirements) as well as managing inputs including too many characters in text fields. It uses a collection of components such as drop-down menus, text boxes, scrolling lists and FAB buttons to provide maximum interactivity to the user in a variety of ways to maintain engagement throughout.

To move between each of these sections of the prototype, use the side panel and select the area you wish to start from, though the cyclical structure of the app's design means you can access all of these eventually from the start menu.

The link to the prototype, starting from the opening screen:

<https://www.figma.com/proto/X1Urcfs6HKtlondcdtHsah/RSR-App?node-id=27-77&node-type=frame&t=AHUapVqTqBKG8y47-0&scaling=scale-down&content-scaling=fixed&starting-point-node-id=27%3A77&show-proto-sidebar=1>

The link to the design page: <https://www.figma.com/design/X1Urcfs6HKtlondcdtHsah/RSR-App?node-id=0-1&node-type=canvas&t=7btKl4H5MNqzBZKE-0>

Identifying the target audience and its impact on the design

As a final part for the design before explaining each flow/screen, I would like to dedicate a section of this document to explaining the target audience and the impact it had in designing many common areas of the house style, such as colour and white space. Therefore, upon explaining the screens in more detail, the fundamental reasoning behind the design can be referred to here.

As the brief states, this app needs to be a quiz app for students revising for their exams. From this, I derived that the age range of these students to be high schoolers up until the age of taking their GCSEs. Thus, I made the core tone and style of the app leaning onto the fun, informal side to ease stress and provide a more exciting setting that should encourage them to use the app frequently. I took inspiration of other apps with a similar target, in particular Duolingo and Kahoot, studying their layout, language and assets to understand how to replicate this look. From this research, I found that, in order to make my app stand out from the others (as the requirements [4] encourage) I would establish a theme to the app prototype that is carried throughout every aspect of design.

As an overarching theme, I chose pirates for several reasons. Firstly, by using pirates, I was able to make a parrot a potential mascot due to revision – the entire goal of the app – being mostly repetition based, and parrots are commonly known for repeating human words (like how Duolingo uses an owl as this is closely associated with knowledge). The parrot takes the role of a guide, and in future developments would be used in further tutorials. Secondly, the idea of buried treasure also fits well, in my opinion, with the theme of gathering knowledge. Within the app, I use treasure as a metaphor for the knowledge the student would be gathering and ‘burying’, building a wealth made out of their expertise in their subjects rather than gold. Throughout the app, I aim to keep this motif clear, such as making the top of the leaderboard having the most treasure, using treasure chest images throughout when a student is learning new things, and any questions created being ‘buried’ like how a pirate buries their treasure. And so, I have used other metaphors in the rest of this prototype (such as pausing the quiz showing a picture of an anchor, the user being called ‘captain’ rather than their name) to establish this theme. From my perspective, the further ingrained this theme is woven into the features of the app, the easier it is for it to stand out amongst all the other quiz apps. I aim to make it look fun and full of personality, using a universally known topic to be as welcoming as possible to students that may be anxious and struggling in their studies.

To further expand on the goals I set for my target audience and thus app tone, at several points I have chosen to animate (at least partially) transitions between my screens using Figma’s animation options upon interaction with buttons or after delays. Not only does this add some realism to my prototype, but this also illustrates the fast, lively pace I would like the app to perform at in some areas. For example, each question during the quiz section using a quick push animation so the questions come at a rapid pace – though not overwhelmingly so, as it is up to the user when they move on to the next round. In contrast, other, calmer areas use a smart animation and ‘ease out’ transition (mostly the loading, create and edit screens) as these are less intense and leisurely. Each transition is important in further enforcing the playful tone that I would like the quiz app to spread, and I hope this pushes it to stand out from the crowd further by keeping this theme throughout.

As a final point, I would like to briefly explain my choices for my colour scheme. The app uses a selection of blues, greens and white. The background/secondary colour (cyan/blue) has been

picked as it is associated with being calm. If students use this app, the goal is to make it as welcoming as possible, so I felt that a neutral colour such as this would be a good fit. In addition, the blue fits well with the pirate theme due to the ocean and sailing. Also, blue is a primary colour, so it has many natural contrasting and complimentary colours that can be used which heightens its accessibility and design appeal. This reasoning is also why I chose white as the on-secondary colour – being the fill for text boxes, it was important that a colour was picked that would provide contrast against text of darker colours. Lastly, I chose a deep turquoise as a primary colour, which is used for buttons that need to stand out and for some areas of text. This is due to the desire to have a dark colour that can be seen against the lighter background whilst still fitting well with the established theme of colours.

Overall, each design aspect has been carefully chosen to try and express the tone of informality and excitement throughout the app to ease the stress of a student trying to study, which in turn will make their study time less of a negative experience and therefore encourage them to use the app more and revise more often without becoming bored of a less colourful atmosphere. Using more 'traditional' styles and features for this app's design will encourage monotony, in my opinion – I aim to balance professionalism with personality so that this app stands out against other competitors.

Design Flows

As previously described, the prototype has several flows that break down the key areas of design and their functionality. This section goes through each flow in order, explaining the design process of each screen such as the use of buttons, images and content as well as touching on future areas of development (including any 'flair' that goes beyond the functional requirements).

Opening Menu

Chronologically, the menu screen is the first thing the user will be greeted upon startup. Therefore, it is crucial that this screen quickly establishes tone, themes and purpose to the student. Figure 1 displays this screen.



Figure 1: The opening menu screen

Firstly, the screen uses the Slackey font for its title (and future headings for screens, such as page titles) as I felt this fits with the pirate theme I have already expressed my desire to show. It is informal without being unreadable, giving an immediate playful tone for the user to pick up on. Already, it stands out from other apps, which use more standard and conforming fonts such as Roberto (the default Material 3 font). Its colour is black and is a large size to contrast against the lighter background and provide easy readability to the user. The second portion of the title ('Revise!') uses a white block on a tilt to make it stand out even more, drawing attention more to the word that expresses the purpose of the app to the student immediately. These white boxes become a common feature for the rest of the screens, keeping a consistent house style. I briefly wanted to make this part of the title against a map image but found it did not contrast well enough so abandoned this idea to prioritise accessibility.

Underneath the title, two images are used. The first is a dotted line and cross that I got royalty free [5] which intends to mimic the symbol for buried treasure with pirates. This is why the line leads from the treasure chest image [6] (reasoning why I chose a treasure chest as a common image explained in the section prior). This is supposed to symbolise that the goal of the app is to

unlock wealth in the value of knowledge – something the app will help to do through its revision and quiz services. Placing this on the opening screen establishes the theme of the app well whilst keeping it simplistic in design with no other images, maintaining white space to give an easier user experience for navigation.

Expanding on this, the main button is positioned underneath the app with the primary colour to draw immediate attention to it. The brief states that the student must be able to instantly access the quiz, and so to achieve this I have made the prototype include a button that will directly take the user to start a quiz (which I will show further in the section ‘Flow 1 – Quiz’). The button stands out against the background, eye catching to the student to make it easy to locate with little confusion. Furthermore, the button uses the text ‘Lets get revising’ to eliminate any lingering confusion of its purpose, stating to the user directly what the button leads to whilst keeping a joyful, casual tone that is used in the other app screens. Using the text ‘Start Quiz’ or similar would have also suffice, but I was heavily reluctant to lose the personality in this app prototype and so chose to make this text, and all future text, be a lot warmer in tone, using exclamation points to punctuate each phrase with excitement.

Lastly, the screen uses a FAB for the menu, which includes options that are not the quiz all one container. My logic is that I wish to make the primary focus of the app quizzing, and so eliminating other obvious menu options on the opening screen further makes the screen easier to navigate, which is always the focus with this prototype going forward. I felt that having separate menu items on this opening screen would add clutter that would take away from this, and so decided to use a FAB that, upon being pressed, navigates to a menu screen with a unique and bouncy animation that rolls the button to the side (see Figure 2). Upon being pressed, the background dims to remove attention away from the menu, something that I found common with Material 3 design standards when creating a menu similar to this one.



Figure 2: The menu screen that uses a smart animation to fluently transition into this state

The close button (the circular button with the cross icon from the Material 3 library) is coloured differently to draw attention to it the most, so the user knows how to exit the menu quickly (which animates back to the original state of the opening screen). It uses a material 3 icon that is universally recognised as an exit to avoid any unnecessary confusion for the user. Along with this, there are three buttons on the white arc which all lead to different flows which I explain later, each clearly labelled to, once again, make the navigation of the prototype as easy as possible. As a final note, I use a rounded object for this menu as soft edges often have connotations of being calmer and more friendly (for example, character design in animated media often uses circles in their characters who they want to be shown as outwardly friendly). It is why that here, and throughout this prototype, I avoid the use of sharp corners, trying to emulate this same feeling by using basic shape theory.

Flow 1 – Quiz

The main purpose of the app is to provide a quiz for a student. The flow referenced in Figure 3 displays the flow used in the prototype of this app. Within it, I have modelled two question formats I would like to implement to add variety to displays to maintain user engagement. By providing several layouts (though only two are within the prototype based on the number of answers, future developments could create more) I hope to make the prototype more engaging and less repetitive/dull.

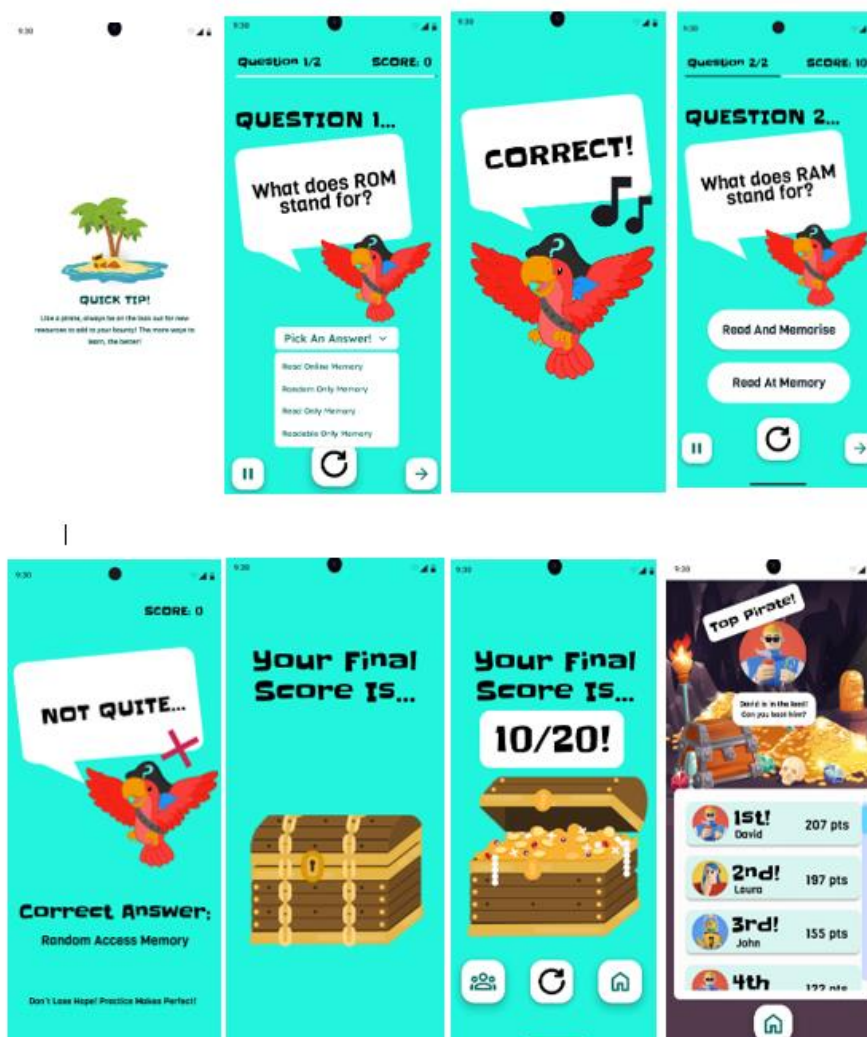


Figure 3: The flow that goes linearly throughout the quiz process. To show a correct an incorrect screen, I fixed the result so one will always be false

Like many other screens, the quiz uses the same cyan background throughout the process. Changing the colours would be disorientating for the user, and (due to the fast animations/transitions) may potentially trigger visual distress for people with epilepsy or autism, both conditions having the potential to be overwhelmed with sudden changes in colour in some cases. The only exception is the loading screen and the leaderboard, which I explain.

The loading screen uses a white background, animating in with a calm ease out transition. In many applications, loading screens provide a calmer shift in tone, which I wanted to follow. In addition, to make it more engaging, I have added some text that contrasts well with this background. The intention is that this text will display a 'top tip' from a random selection of text in a list which provides information about ways to study or features in the app. It is not a necessary addition but adds character to the app and makes it seem more catered and compassionate to the student's needs. Finally, it uses a calming picture of an island that fits with the pirate theme [7]. My choice for this image was trying to have the image correlate to a ship closing in on an island, or 'sailing' to the quiz being loaded.

This loading screen is also the first example of the switch in font that I use for smaller headings and text/subtitles. Though the Slackey font is great for eye-catching titles, it does not scale well when it becomes smaller, being less readable than I preferred. To solve this, I chose a simpler secondary font that is readable at all sizes so that clear communication is maintained throughout the app.

The loading screen is then animated with another transition that makes a cyan circle grow from the centre image to transition into the first question in the quiz. As shown in Figure 3, this screen is consistently designed with several things: the progress bar (as requirements specify), a score count (requirement), a speech bubble containing the question with a parrot asking it, an answer area varying between a drop-down menu (displays all the answers) and a basic selector, and finally a set of 3 buttons at the bottom. These elements all stay the same to make the house style consistent – a varying style loses professionalism, in my opinion. Consistency in areas is an integral part to pushing the impression that this quiz app is made with quality. I have already spoken about my colour choices, though I will continue to say that I chose to make the parrot (my own design/creation) red due to it being on an opposite side to the colour wheel of the colour scheme. This makes the mascot stand out in any area it is used in. drawing inspiration from the Duolingo owl, this parrot will serve the purpose as a guide and question-asker – parrots, like revision techniques, repeat words and phrases and so it made sense for me to pick this animal over a human pirate. In addition, it keeps the simple, soft-lined design that all the other images follow much easier. A simple design allows more assets to be created easier and quicker – a factor that will be heavily considered in further production as I would like to create multiple assets to use throughout the main prototype of the app, such as different expressions.

I briefly mention the three FAB buttons at the bottom of each question screen; these are restart, next (question), and pause. They all use universal icons to communicate their function, as using text would overcrowd the screen (I have already talked about why this is undesirable). Each use a drop-down shadow to add weight, giving them a floating appearance as typical applications that use Material 3 have, and I wish to conform to these standards as closely as possible. I did have to download my own icons from the extended library for the pause button [3] and my own for the restart [8]. The restart and next button navigate as their name suggests, restarting the quiz and moving onto the next question to follow the functional requirements. The pause button

loads an overlay, shown in Figure 4, that can be exited through exterior tapping or pressing one of the buttons.

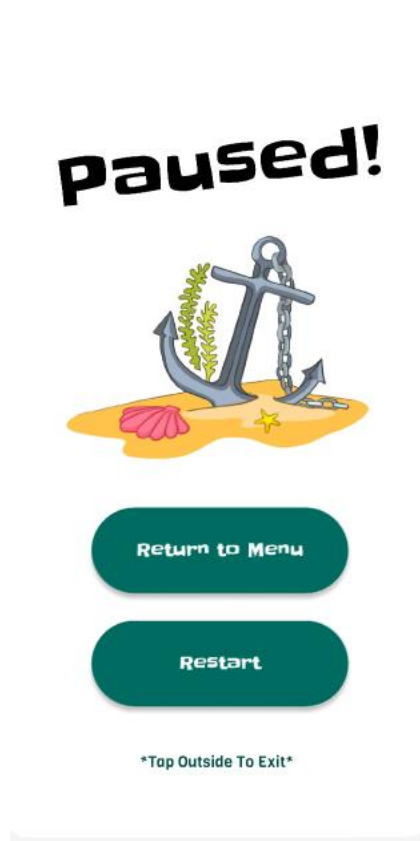


Figure 4: The pause overlay which either takes the user to the start of the quiz, to the main menu, or is available to exit and continue the quiz by clicking externally. This pushes on and off screen

For all secondary screens, such as loading and overlay screens (pause, save confirmation) I use the secondary colour scheme. This is due to their secondary status, often overlaying the background screen and therefore contrasting against it. Also, it is more aesthetically appealing to me to have a change in the colour scheme to reflect these. Like all other screens this pause menu is as simple as possible, only having two buttons and a large title with an anchor image [9] as this correlates with halting, adding to the pirate theme of the app.

Upon completing all questions in the quiz, the user will be taken to a final score display once they click on the next button on the final question. This takes them to a screen that has two states, animating a treasure chest opening [17] (using a delay transition) to reflect the animation I wish to create upon full development of the application. This builds anticipation and excitement for the student and adds a more interactive element that could be developed (such as the student actually tapping the treasure chest to 'open' it and reveal their score). The minute animation is used to make the app that feels less static, looping back to this goal to make it stand out from other quiz apps with a similar target audience.

The second state, where the treasure chest opens, also loads 3 buttons: restart quiz, home (returns to menu) and access to the leaderboard screen. All of these remain consistent in their design for reasons already explained. These are the only options on the screen intentionally to keep the app easy to navigate by providing less needless options for its purpose. However, in future development, I may choose to change the icon for the leaderboard to make the button's purpose clearer, or if its function changes slightly. For now, I plan for the screen to eventually

connect with other students in a class or group (perhaps organised by a teacher), though the prototype would use a model version without connecting to a server due to its in-development status. Therefore, the design may have to be tweaked to accommodate for this, using a symbol such as a bar chart rather than one that implies that a multiplayer/multiple user connection will be established.

The final screen in the flow is the leaderboard screen. As already described, it will display scores of other students, whether they be fake or real depending on stages of development. This adds an element of competition to the app, having streaks that many would appreciate. However, to avoid potential stress to other students who may not like comparing grades, I have made this only a side option that is not necessary to functionality. I use the Material 3 avatars in this prototype, though ideally these would be a selection of avatars the app has itself that fit with the pirate theming such as parrots, pirates, etc. As it deviates from the main purpose of the app, I have altered the house style to include a background image, showing it is more of the 'bonus' type of content. The image is of a treasure trove [16], using the metaphor that the top student has the most wealth (in knowledge). Text is able to stand out through the use of the contrasting white text boxes, and the scrollable list of all participants is coloured lightly for the same reason. At the bottom, there is a button that takes the user back to the start screen instantly for ease of navigation.

Flow 2 – Create

Flow 2 displays the process of the create quiz functionality required in the brief. Figure 5 shows this flow linearly, and the error/validation text boxes (following Material 3 standards) that can occur if the user breaks some logic rules that the brief states, such as trying to add more than 10 answers to a question in the question bank. Upon tap of the 'create' button in the menu, a snappy transition (in which the three menu button menus shrink into nothing, and the white arc grows so that it covers the screen) is activated. Then, after a delay, the first screen to write the question is loaded. This can be viewed upon running the prototype from the opening menu.

The flow begins with the screen that asks the user to write their question. I use the Material 3 text boxes here that would receive the input and save it, though changes to files would not occur until at least two answers have been submitted alongside this question, which the next screen shows a prototype design of. The question screen is simple and to the point, asking for a name and using a large image that correlates to this request (whilst still within the pirate theme) [10] if the student is not able to understand. This is also classed as a secondary screen, as it isn't advanced in purpose compared to others, hence the white background. Also, the expansion of the white arc in the menu that serves as a transition is also the same colour, which allows the animation of the screen transition to this screen to be gentler and more seamless in an ease out. From here, the difference in tone should be obvious – these operations are not aiming to be as playful as the more 'game' side of the app, and the softer transitions I put into place aim to reflect this. The screen also has two buttons with simple functions, both using the primary colour to stand out. These are to create the question, which transitions to the answer screen, and an exit button, which triggers the overlay. This is to try and catch the user if they wish to save a quiz question and make the mistake of thinking they can partially make a question. The overlay pop up dims the background to remove it from focus (using the Material 3 functions) and has an alternate, tertiary colour scheme that is more subdued to signify its importance against the more informal tone of the app as these overlay boxes are only used for crucial validation and syntax errors, so should be significant against the rest of the design whilst still being recognisable in the house style.

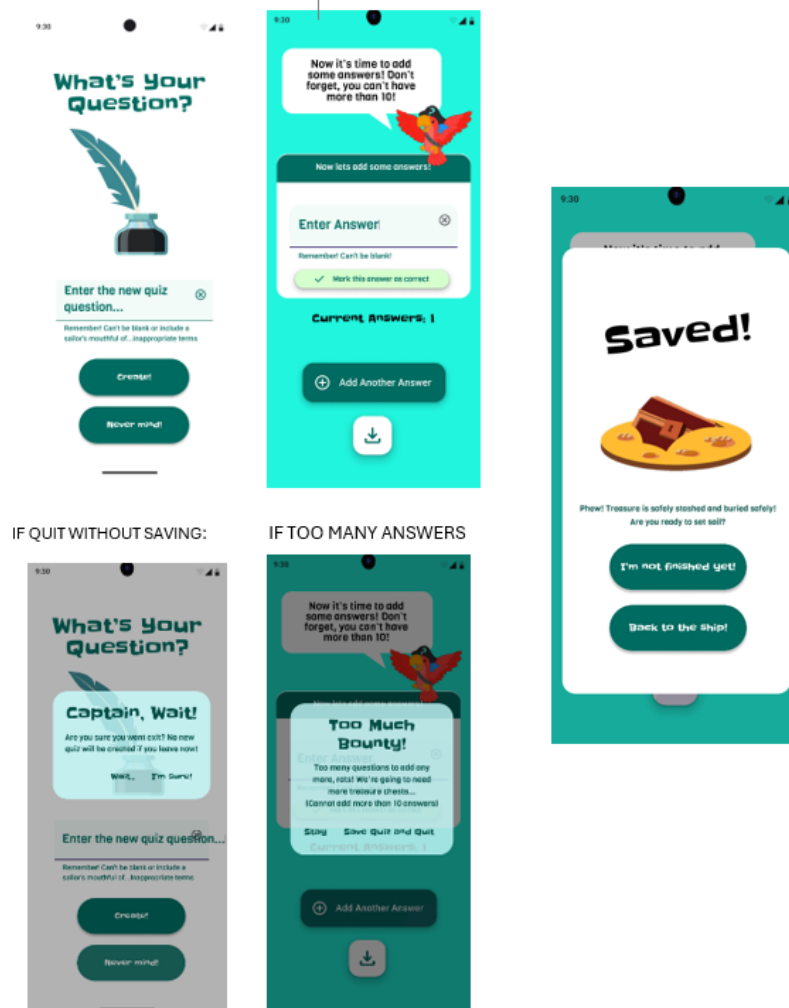


Figure 5: Screens for the second flow, where the user creates a question then answers. Underneath each screen is their alternate design if the user breaks the validation rules

upon creating the quiz, the screen transitions into the create an answer screen. It uses the parrot mascot again to provide additional information, so the user is not confused with the function and is aware of any constraints. The white textbox over the background draws attention to it, showing the user that it is the key feature on the page. Likewise, the button to add an answer is filled with the primary colour, a FAB that urges them to add an answer easily. This button, when pressed, would save the answer in the text box, clear the text box to reset the state for a new answer. In addition, there is an answer counter at the bottom in black heading text so the user is able to keep count of their current answers. Like the previous screen, there is another pop up if they exceed 10 answers to one question, as the brief states. This gives two quick and easy options – return to main menu whilst saving or remain on the screen. Along with the consistent ‘save’ FAB that is used on multiple screens (establishing its purpose quickly so the user can learn the controls as efficiently as possible) there is a button that deviates the colour scheme, using green, to mark the current answer as the correct answer in the quiz. This is due to green being commonly associated with being ‘correct’, making the purpose of the button clear and also doubling as a way to draw attention to its function, reminding the user that they need to make one answer fit this requirement.

Lastly, there is an overlay screen that is activated upon saving the question, using the same secondary house style as the other screens (of which I have already explained). It has an image of a partially buried treasure chest [11] as this correlates with the user having created a new question in their ‘loot’ to use for later.

Flow 3 – Edit

The third flow branches from the main menu, displaying the process of the editing options that the prototype offers for each question. For now the design only displays if only one question bank were available, but this could easily be reused for multiple question banks in future development. The structure is mostly linear until the option for two buttons, where one leads to the ‘add answers’ screen whilst another is ‘edit answers’. This flow also reuses overlay screens, which I will not include apart from a brief reference as they have already been broken down and explained. Figure 6 displays this flow.

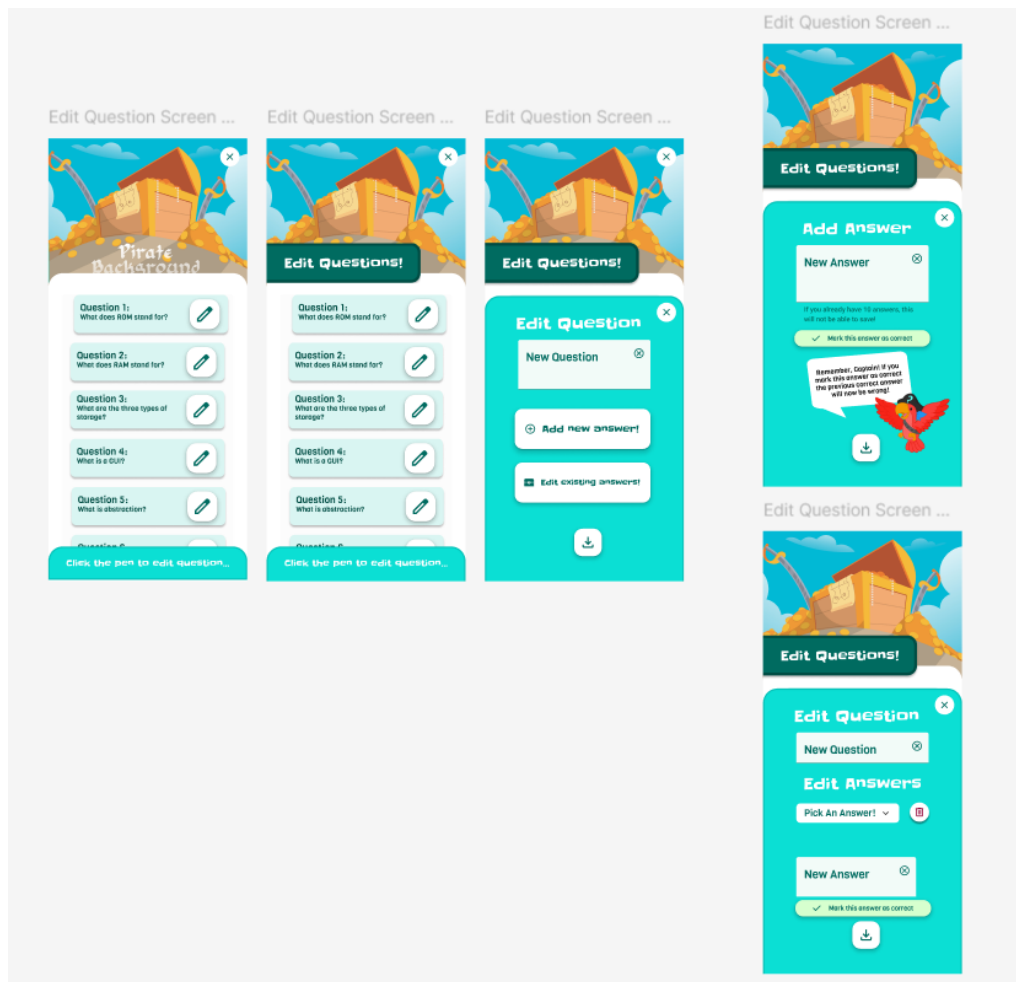


Figure 6: The edit screen flow. The user has the option to select the question they would like to edit from the list and then edit existing answers, or add a new one, after being given the option to edit the content of the question itself.

Upon pressing the ‘edit’ button from the menu, the first state of the edit question screen will slide in, followed by the second (which slides in the title bar). Once again, this brief animation makes the app, in my opinion, feel more ‘alive’, keeping the upbeat and informal tone, though more subtly than the main excitement point (the quiz) due to the more technical aspects of this menu. Refer to previous sections in this document for a more thorough analysis on the animations/transitions in this prototype.

At this point in the design breakdown, it is clear that many assets are being reused; within this flow, I have reused the scroll list, the FAB save button, the ‘mark answer as correct button’ and many assets such as speech bubbles. This is intentional, as in Material 3 and UI’s in general the repetition of assets is necessary to make production efficient and to make the application

consistent in design. Constantly changing assets will confuse the student/user who, as the brief states, need an easy experience in navigating and learning how to use this app. Without consistent assets in this regard, it will be harder for the user to memorise controls and make the user experience more frustrating, which defeats the purpose of the software's design. Therefore, I have reused these assets where possible.

This menu uses an image as the background to correlate with the purpose of the screens – unearthing the 'treasure' to make some changes. This is temporary, having used a stock image [12] (hence the text at the bottom before it is covered up) that will be illustrated upon development. The image is bright, giving an upbeat tone that is amplified by the lighter colours I use for this UI design. Rather than use the darker colours for contrast with the pop up tab (activated to animate and push upwards upon pressing the 'edit' FAB beside each question), I chose to use an inverse of the colour scheme I have established, making the background cyan the secondary colour in this case as I felt it fit better with the colour scheme overall, and allowed the title tab to stand out more (which uses a darker colour). In addition, the cyan background colour is associated with being an important colour in the app, signifying an interactive process. Therefore, this colour makes sense to use as the tab has options to edit questions and answers. It clues in to the user that an important/interactive process is occurring. This tab has a clear button (using the Material 3 standard icon) to close it, which uses an animation to push it back down. This is so the user can clearly navigate away from the tab with no struggle, aiding in ease of navigation.

The initial options the tab has is to edit the question, then uses two large FABs to steal the user attention to ask what action they would like to take next (if any – the user has the option to just save the change of the question). This branches into the last two screens of the flow: the top allowing a new answer to be added, and the bottom allowing answers to be edited or deleted (using a treasure chest icon that I downloaded royalty free [13] as this links with the treasure metaphor I have already explained) through the use of the reused drop down menu and the delete icon button. Unlike other buttons, it is worth noting that the delete icon is in red, as red is associated with a permanent, negative action in software design. The change in colour scheme draws attention to the fact that this is a permanent change, resulting in the erasing of data and so requires more thought.

As a final point, the prototype, when being ran, does not change the results of the drop down for each question as it is only a model of what to expect. This is the same for the list of answers, though in the programmed prototype this will change to be relevant to the current question selected.

Flow 4 – Settings

Finally, the last flow of this design prototype is a simple linear one between the menu and the settings screen, as shown in Figure 7. This is more underdeveloped than the previous screens as it is not strictly a functional requirement, though I would like to add these to the app. I have not planned how to implement these yet, but I wish to as part of flair upon the assignment due date.

Like the other menu options, the same shrinking transition I created is used. The menu then slowly fades in gently. The soft transition reflects the tone shift – settings are supposed to be calm for the user, as they adjust the app to their needs.



Figure 7: The settings screen which includes options for audio, personal features (that could be things like colour scheme, etc), visibility (such as text sizing), and the 'question cove' (explained below)

For now, the settings consists of one screen which contains various buttons laid out against each other. This layout was taken from a Material 3 design library example, and I replaced the images with my own, and ones I sourced for free [14][15].

The screen has a subtle text box at the top that uses softer colours to avoid being overwhelming and distracting from the setting sections, as I am aware that students with learning disabilities could want to access this area first. For example, if they wanted a calmer colour scheme that was less overwhelming to them, they would not want a vast number of colours that contrast being in the area they can do this from. Once again, I lean more into blues for this text box due to the calm connotations the colour has.

The buttons all use a white background, as this does a good job of standing out whilst not being too overwhelming for the same reasons stated prior. Each has their own image to guide students who struggle reading and rely more on picture queues, such as personal settings being symbolised with the picture of a human. Each will be a button that leads to an overlay or separate screen that adjusts these settings.

The question cove is an area I wish to add as part of flair. As students may struggle and have questions, I thought it would be a good idea to have a question 'cove', or hub where they can submit a question about a topic that the teacher can review and answer. All answers will also be displayed in this area, or the teacher could choose to explain in class what the answer is. Having experienced this myself as a student, I feel like this would be a good idea to cheer up students that feel like they don't know any content despite their best efforts. Perhaps, in later development when a teacher role can be implemented, the teacher can make quizzes based on these questions alone. Lastly, the screen has a simple FAB that takes the student back home, saving their settings automatically. This has nothing else around it so it is obvious and therefore increases ease of navigation.

Summary/Final Points

Overall, this design focuses on a few key aspects: ease of learning, accessibility, navigability and enjoyment. All design choices I have made have been for these four goals, using the Material 3 design kit to aid in this. The app purposefully doesn't have many complex functions so students can grasp it fast, nor does it have too many buttons – the most important one being the access to the quiz, which is very obvious upon startup. To accommodate for all users, this app uses contrasting colour schemes in text and background for easier visibility for hard of sight (such as colour-blindness) and offers a selection of settings to personalise this experience further. Lastly, this app wants to stand out, and does this by creating a fun, informal environment that differs from its competitors to try and take the stress out of revising. This is done through cartoon images, springy animations, colourful house style and clear, playful theming of pirates throughout the software.

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