



# Matthew Mason Interaction Design And The User Experience: TMA 03

MATTHEW MASON  
C6122243

## Table of Contents

Question 1.....	2
Question 2.....	3
Question 3.....	4
Question 4.....	5
Question 5.....	8
Question 6.....	13
a.....	13
b. ....	13

## Question 1

My project involves redesigning a Dungeons&Dragons mobile app to support new and experienced users providing an easy to learn, convenient, efficient and fun way to create and manage characters and their stats. The main activity involves entering and manipulating data requiring dexterity, fine motor skills, flexibility, good eyesight to read text and use the phones keyboard, attention to detail, memory, reasoning and being able to respond to change. From a quiet home setting to a loud public space, the environment can affect the activities, meaning the app should work as a companion to the game allowing for an efficient and unencumbered way to manage the character, enhancing the experience while not interrupting the flow of the game.

Requirements that have been identified include the following:

1. An in-app guide to access relevant information. It should be effective and efficient at finding the correct information, providing good utility and good feedback by loading the correct information while making the user feel engaged, and that the activity is helpful and resourceful.
2. Efficiently creating a character at the touch of a button. It should encompass safety by allowing adjustments to the characters stats and include all design principles. The user should feel impressed and excited by the versatility of characters the app can produce and enthusiastic about using it.
3. Creating a character in less than 30 minutes. This requirement will encompass all usability goals and all design principles as it's the main driving force for creating the app. The user experience should be enjoyable and engaging, it should be leave them feeling the app is intuitive, reliable, versatile and dynamic but more importantly, fun to use.

## Question 2

A player who isn't familiar with Dungeons&Dragons wants to join a new campaign their friend, the game master (or GM for short), is running at their house the next day, and they want to make their own character to use in the game rather than using a pre-made one. They want help, but their friend is busy, so they need a guide that explains everything efficiently, step-by-step and without being overwhelming, and that's fun and easy to use, almost as if their friend was there guiding them through the process themselves.

Rather than waiting until everyone is together and asking for help; not wanting to hold up the game they decide to find a quiet area at home where they can focus on starting the process as they assume that it will take a long time. Most of the interaction with the app would take place in this environment, apart from when rolling dice to determining ability scores as this involves a degree of luck and chance, therefore the GM may wish for this action to take place in their presence to ensure there is no cheating. This may take place right before the game begins which would typically be at someone's house where there is little distraction or noise, so everyone is able to hear each other.

It uses the concept of the physical player guidebook to replicate the information available in a digital and interactive format, including character summary sheets, the games rules, the game mechanics and the ability to generate and manage a character in a much more convenient way. It also uses the concepts of maths and rolling different types of various sided dice to determine results of specific circumstances, such as using numerous dice with 20 sides to help determine ability scores.

The main actions can vary depending on user choice, but they mainly consist of picking and managing a character's class, race, background, equipment, spells and ability scores. At later points, users will also need to level up their character by adding additional details and considering specific choices that will affect various stats where these choices will be reflected on their characters summary sheet and will change the rules and mechanics for how their character can engage within the game.

The user experience goals should focus on being efficient and fun to use, it should encourage exploration through versatility and impress users by the array of different character configurations that are possible while still being easy to learn. It should be clear how to use each feature and not allow incompatible and conflicting choices to be made. It should act as a companion to the game and not require constant attention, rather only being used when needed and be intuitive to use.

### Question 3

For my Dungeons&Dragons app, a mobile interface provides the best fit for several reasons. Firstly, integrated mobile accessibility features aid those with physical, sensory and cognitive impairments such as limited dexterity, poor motor skills, ocular impairments, auditory issues or language problems. Mobiles can help with these challenges through voice-activation, screen-readers, magnification, one-handed modes, gesture controls and the ability to connect external devices for control and communication such as keyboards, hearing aids, braille devices or disability controllers.

Secondly, as mobiles are ubiquitous, we can assume many users are familiar with this type of Graphical User interface where touching parts of the screen carries out some functionality. This affords beginners to learn quickly, and infrequent users to remember how to carry out operations later as gaps between sessions can span between days, weeks or months. The actions the app will require to function are comparable to other apps providing affordance, consistency and perceivability across similar tasks such as typing using the onscreen keyboard, selecting items from a drop-down menu or entering numbers akin to using a calculator app.

Finally, a mobile app allows players to create their character in a different environment from where the game takes place. However, they still need to take that information with them and update different settings throughout the session which means the interface needs to be efficient and effective at carry out operations.

Other interface types were considered, such as connecting to a web interface through a mobile or tablet allowing for a collaborative experience during sessions, however this could create a frustrating user experience through poor internet connectivity. Mobile phones also allow context aware computing to upload and share creations as backups online if the user enables this and to use sensors such as accelerometers and gyroscopes to roll dice, or microphones for speech-based operations.

(300)

### Question 4

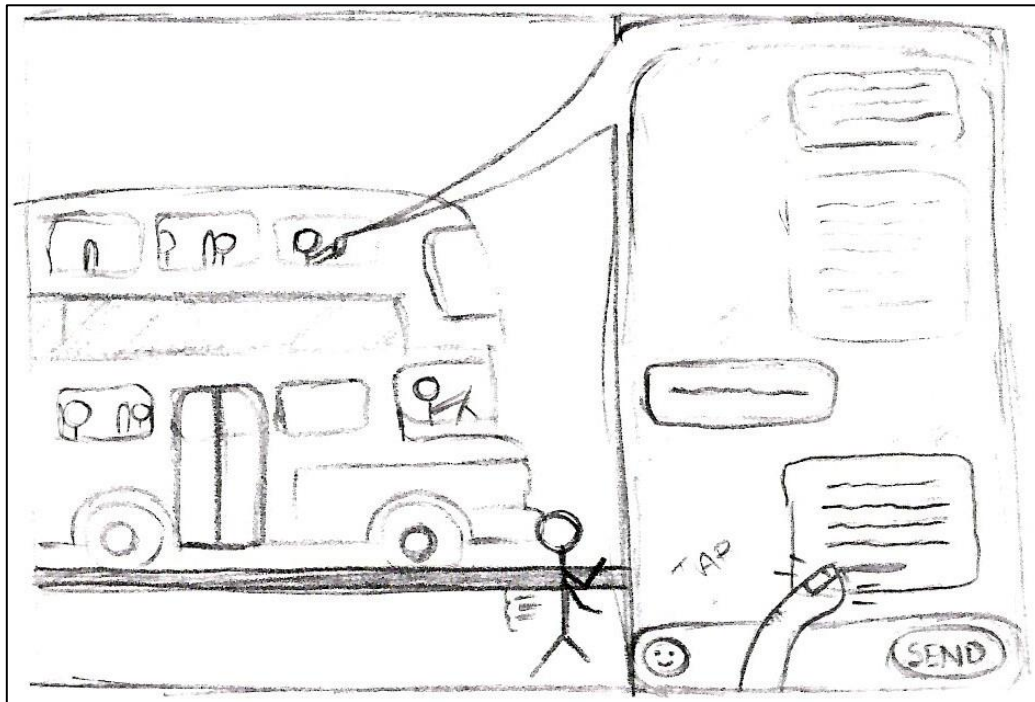


Figure 1: Long shot – a view of the user texting their friend while on the bus. They have been invited to join a Dungeons&Dragons session the next day and they have been told they need to make their own character. The user's friend has sent them a link to an app that will help them create their character as they have never played before.



Figure 2: Long shot – The user has some time before they need to be at their destination and they anticipate it will take a long time to make their character, so they stop off at a coffee shop with free wi-fi so they can download the app and make a start on generating their character.

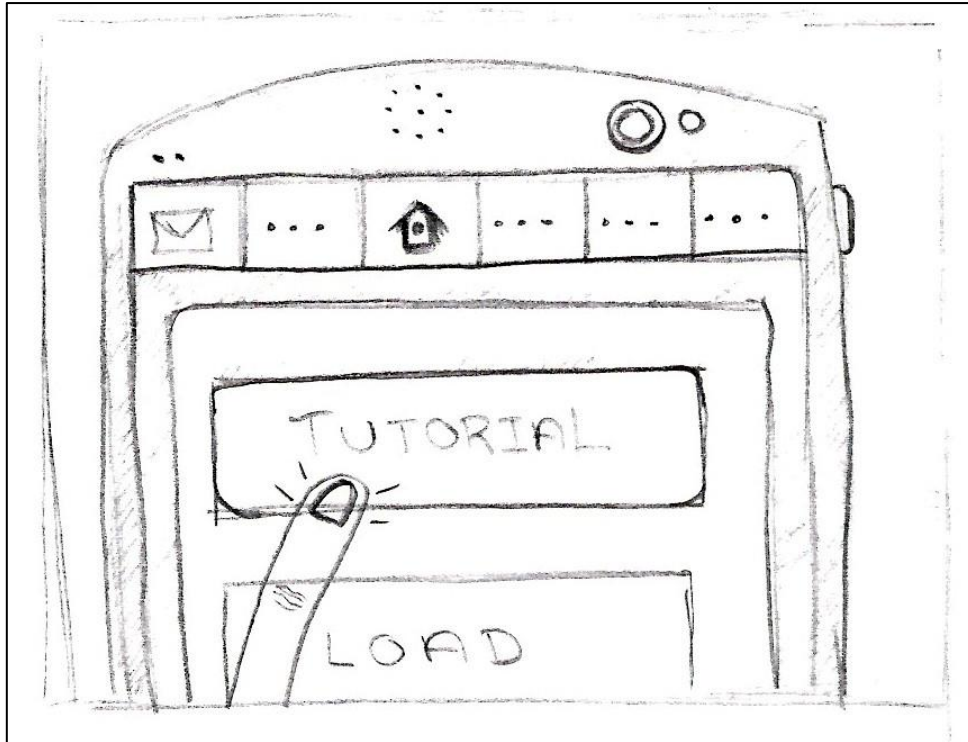


Figure 3: Close-up-shot: The user's friend mentioned the app comes with a tutorial to help them get started. Once its finished downloading, they open the app and the home screen has a button labelled 'Tutorial' which they tap to get the process started.

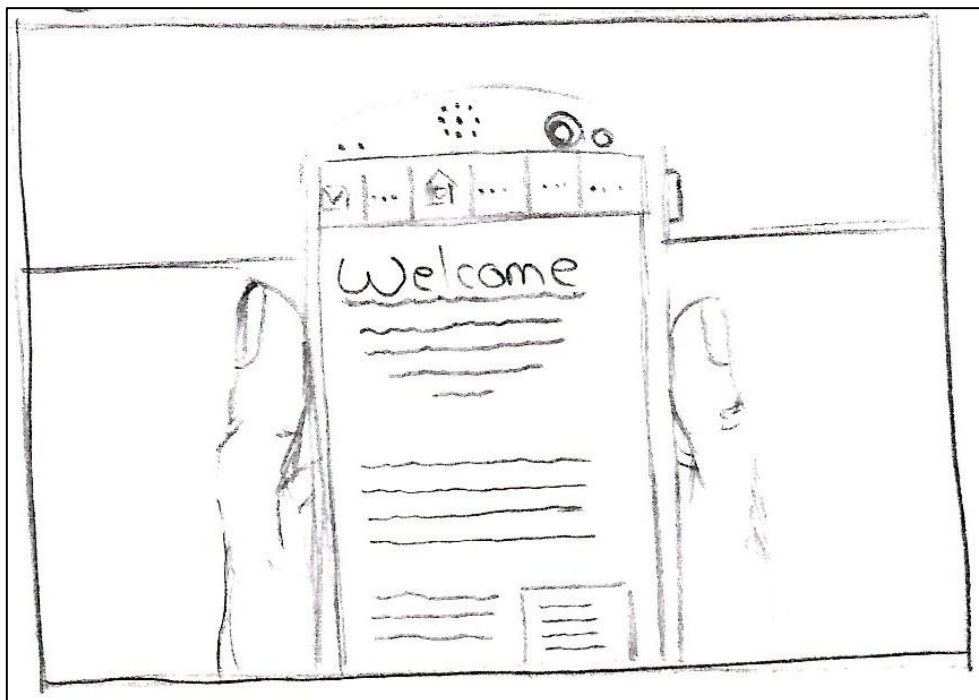


Figure 4: Point-of-view shot: Having clicked the 'Tutorial' button, the user is shown a welcome message that explains how the tutorial works and what the first step will be; picking the race of their character. At the bottom of the screen are three buttons that help navigate between different screens.



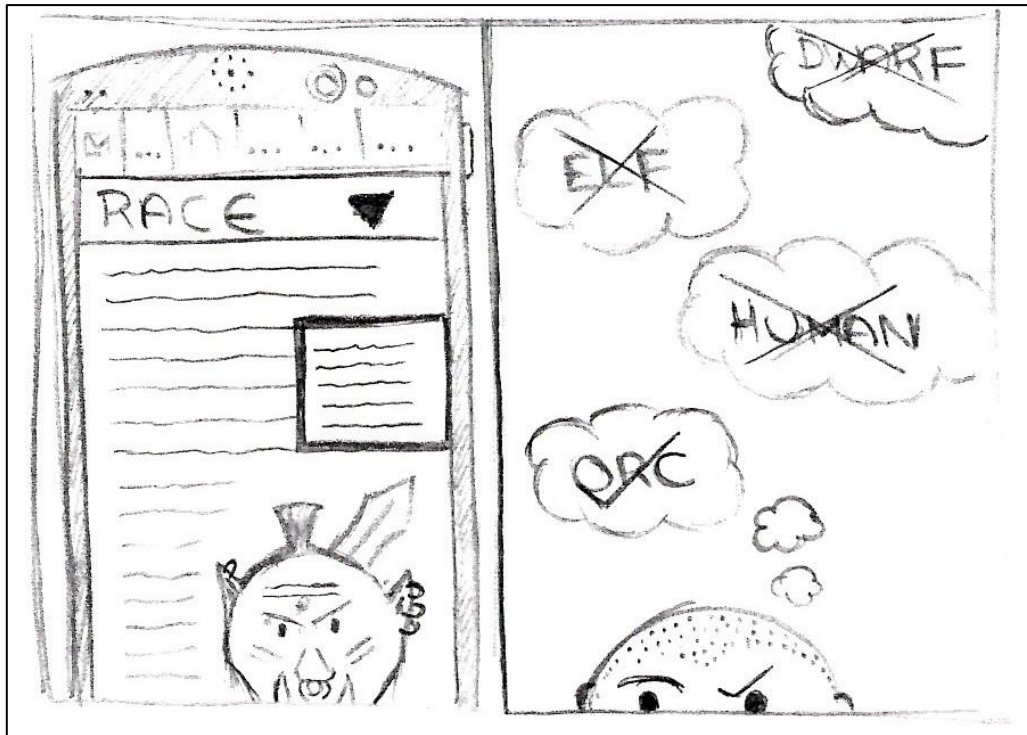


Figure 5: Point-of-view/Close-up shot: The app displays information about the currently selected race which can be chosen from a drop-down menu. We can see the user thinking about the different races they want to play and deciding that they want their first character to be an orc.



Figure 6: Long-shot: The user is interrupted by a notification telling them that they have a meeting they need to get to. The user has closed the app, happy they have decided on their race and spends the rest of the day returning to the app to carry on with the process.



Question 5

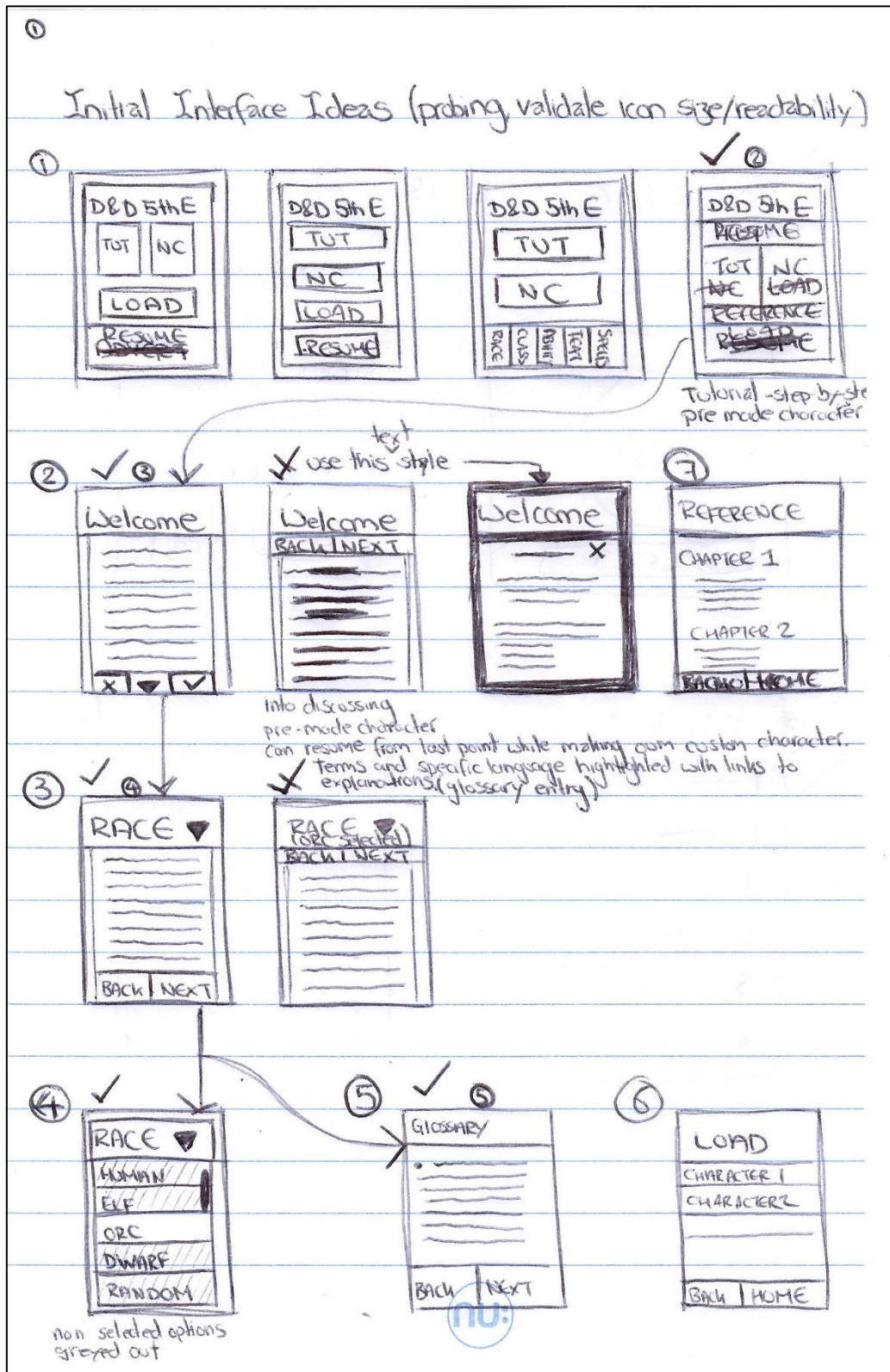


Figure 7: Some initial interface design ideas to explore hierarchy, layout designs that provide ease of use and consistency across multiple sections of the app and validate icon sizes and readability.

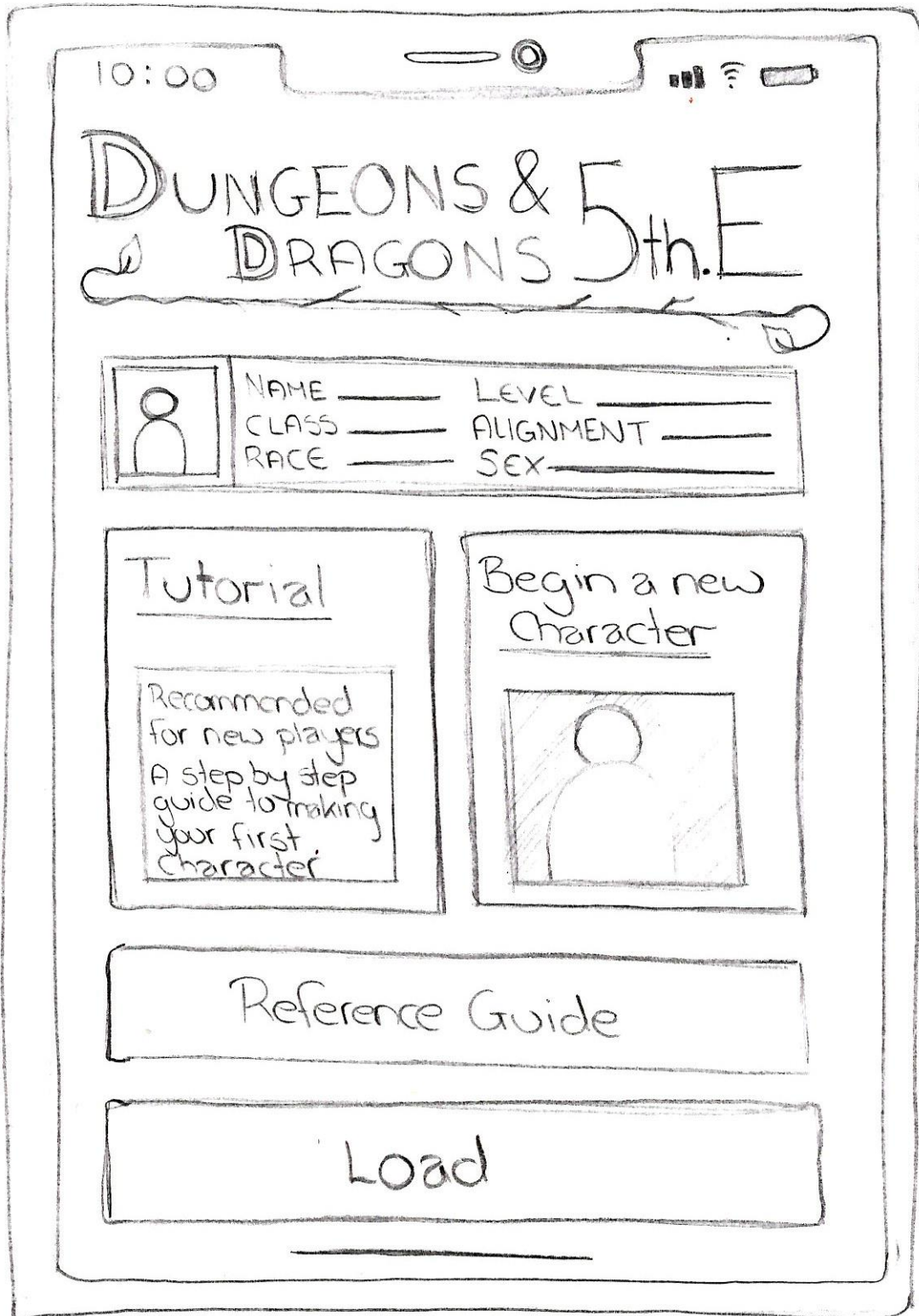


Figure 8: The main screen gives users the option to continue with the most recently used character, starting a step-by-step tutorial that guides users through the process of making a pre-made character, starting a new character without assistance, opening the reference guide or loading a different character, either one that was saved previously or one that another user has shared online. The user simply needs to tap on the option they desire, and the app will take them to the appropriate page.

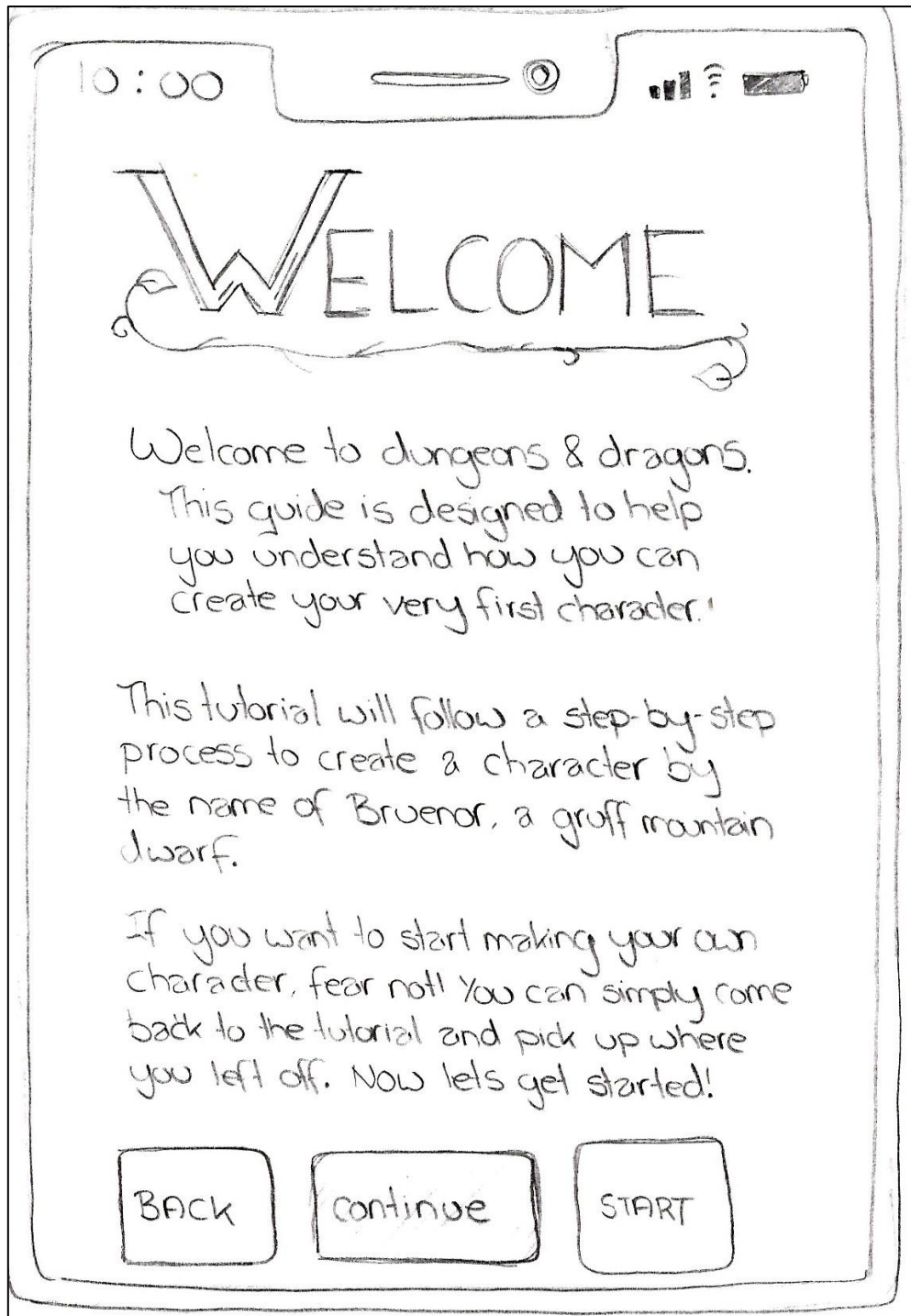


Figure 9: If the users chooses to begin the tutorial, they will be greeted with a welcome page that explains what the guide is used for, how it works and how they can leave the tutorial and return at any time in the future. It also provides navigation buttons at the bottom of the page to begin the process, return to the main screen or continue from where they last left off. If this is the first time the have used the guide, the continue option with be greyed out to symbolise is cannot be selected at this point in time.



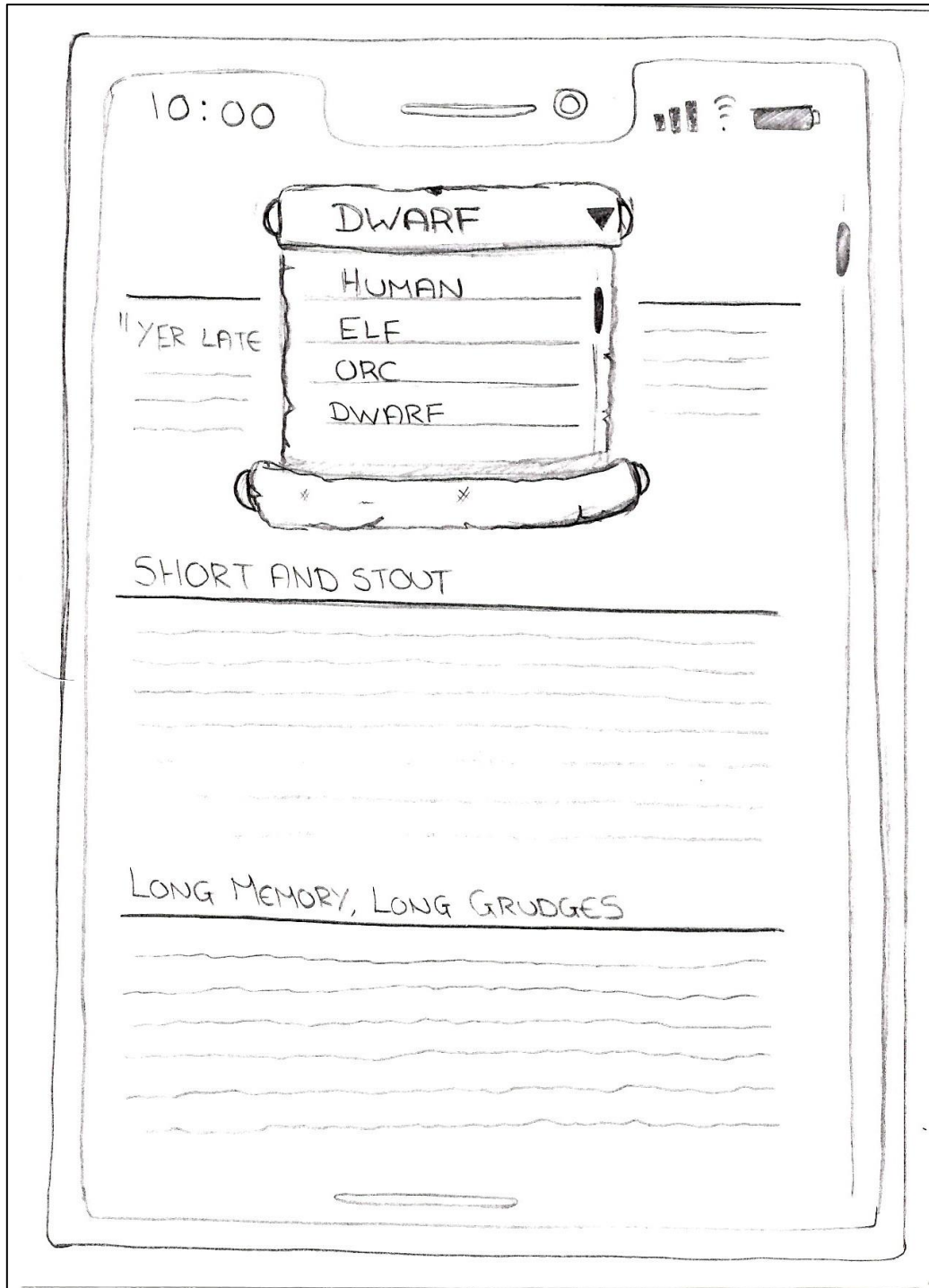


Figure 10: This page shows the race selection screen. A drop-down menu in the style of a parchment scroll can be tapped on to expand a list of different races the user is then able to scroll through. Upon selection, the screen will update the page to show the correct information relating to that character. Once they have scrolled down to the bottom of the page, the app will provide the option to select the current race and continue or to return to the previous screen.

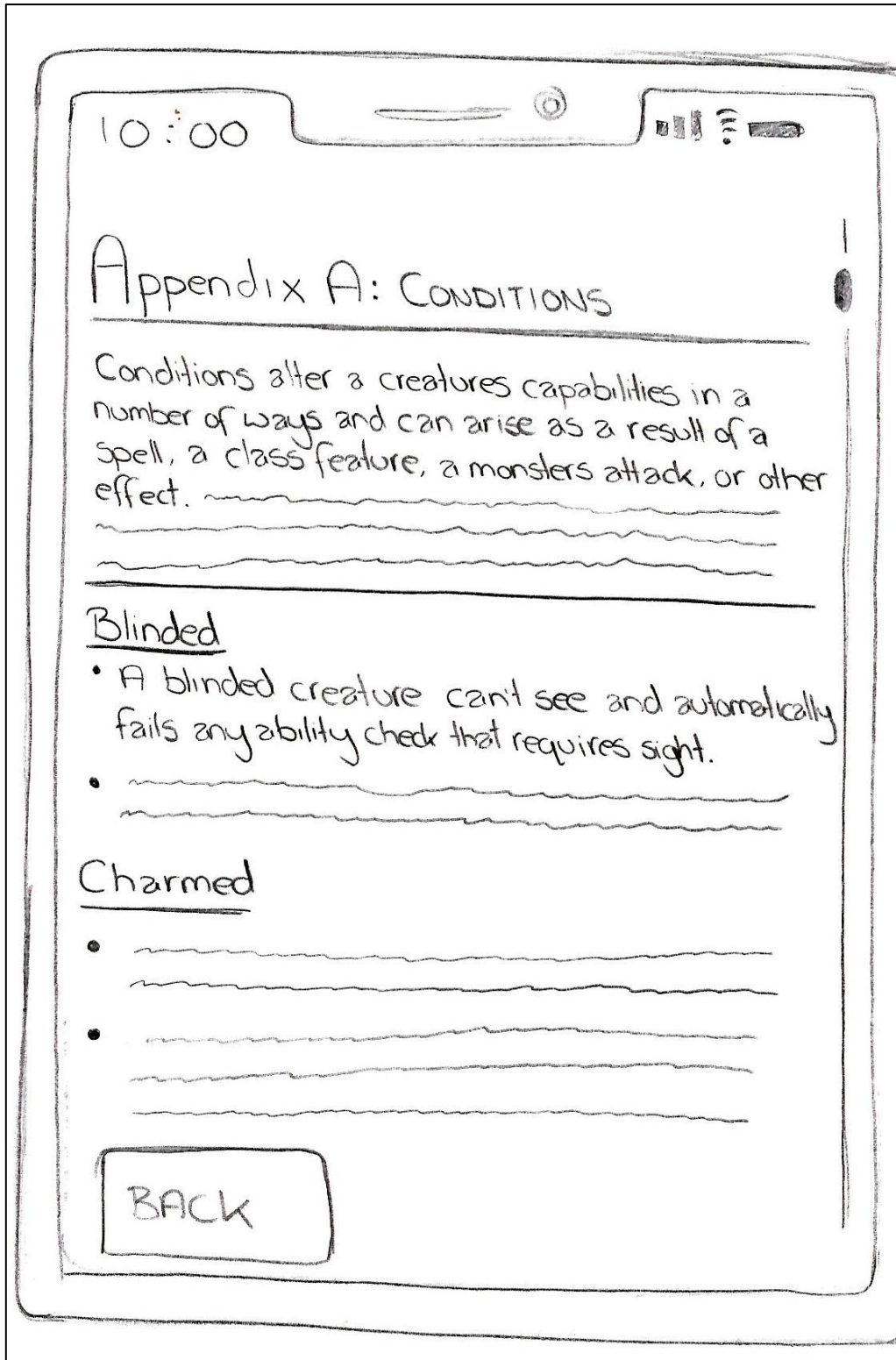


Figure 11: Some text in the app will be highlighted to show it is a link to another page. In this case, it has opened a page to the reference guide that explains to the user information regarding conditions that can be inflicted upon characters in the game, what that condition does and how it can be inflicted upon the character. The back button allows to the user to return to the previous screen from where they clicked the link.

## Question 6

a.

The use of cultural probes to explore the Dungeons&Dragons community can be applied to help users find inspiration and ideas for creating interesting characters while helping with the exploration of issues surrounding the wider context of cultural inclusivity and question if current requirements can elicit investigation into better suited usability and user experience goals, improving the design.

This leads us to question some requirements such as creating a character at the touch of a button. If people have a richer understanding of cultural ideologies and beliefs that can be incorporated into the game, do we omit details such as a character background when generating a random character or can custom background be added and shared for other users to include in their own process. It might also define the order in which a person creates their character, for example starting with the background first then picking other elements such as race.

Using cultural probes will benefit users by allowing them to create richer characters in turn leading to richer stories and experiences.

b.

By adopting a cultural probe approach to promote engagement within the community, its possible to identify several materials to help investigate this process such as the following:

1. Camera: By asking the participant to complete tasks such as taking specific pictures, we can engage them in thinking about ideas that will help establish a background for their own character and widen their cultural horizons at the same time. For example, taking a picture of the following can relate directly to an attribute or a character's background:
  - Family and friends: characters bonds.
  - Proudest moment: characters ideals.
  - Something that represents your culture: Where the character originates.
  - Something important: what does the character treasure more than anything? This is left vague as it could be a thing or an idea that they hold such providing care and comfort for a relative.
  - A bad habit and something that scares you: character's flaws.
2. A map and different coloured stickers: asking users a series of questions helps with thinking about their own journey and taking aspects of those with them into the characters background. The task also helps them explore wider cultural ideas.
 

The user takes a random coloured sticker and places them on the following places:

  - Where any relatives live
  - Their favourite place to go on holiday
  - The place where they're going on holiday next
  - Where their dream holiday is
  - Where they would like to go but can't
  - Where you don't want to go

Users then use coloured pens to draw lines between every sticker and find a folktale from a country where the lines intersect and retell that story on the back of the map. This helps participants think about their characters potential reasons for setting out on their journey, affecting their backstory.

3. Coloured pens: For each sticker on the map the user would find out what that colour represents in that country and draw a picture that represents the colours meaning. For example, placing a

red sticker might result in them drawing a lucky cat. This helps to widen the participants view of cultural representation and allow them to see the world from different perspectives.

These materials lead us to consider if the requirement that 30 minutes is a reasonable amount of time to create a character. Some of the tasks above could take longer than 30 minutes themselves so the return rate of these materials would also reveal information about the user and how much detail they are willing to put into their own character and how this would affect efficiency. If users can create a random character or one in 30 minutes or less, will this hamper their experience and opinion of the game and detract them from playing or encourage them to try and make a multi-dimensional character? Would changing the time provide a better user experience because they feel that more time can be spent on making something personal or would it put people off?