**UI Design**

Considering the login page will be the first one a user sees when opening the program, I chose to utilize Figma to create the design for it for the purpose of this project. I discovered a straightforward SVG and adapted it to serve as this application's symbol. The layout is clean and appealing, yet it still makes it clear that this software is for warehouse inventory. I chose the name "iTrack", also I’m considering renaming it to “Tracky” to be consistent with the app's features and goals. Behind the primary logo, I include a title section with the text "Login" to indicate the function of the display on the far right and the text "Application Name" on the side. For the sake of consistency and equilibrium, I made sure to align those text boxes according to the screen's absolute center on both sides. We've placed the primary form on the page just below the title area. There are two fields there.

A screenshot of a login screen

Description automatically generated

The ID and Password will be utilized to obtain the consumer's authentication details. To make it obvious to the user whatever to enter, I provided both of those fields labels or placeholders. Issues with field validation will show up beneath each of these fields. These error messages were included in this mock-up for purposes of development, but they are only going to appear if the user attempts to log in after leaving either of the fields blank. In order to let the user realize if they unintentionally entered the wrong login or password, I additionally provide a problem handling notification for incorrect login information. Whenever I start working on the project, I might switch these error messages to toasts, but for the time being, I believe their placement and color serve all of our needs whilst still retaining a clean look.

Lastly, the buttons are located beneath the form. After the individual has provided their credentials, they can submit the form using the 'Login' button on the right. When challenged, it will transmit that information back to the server where it will be compared to the records present. If a matching record is located, it ought to respond with OK and subsequently start a routing process that will take the user directly from the login screen to the main screen, which will list all of our available products. As previously indicated, if no matching information is located, it is going to give a negative response and cause the user's data to be shown as erroneous. I included the second button on the left side, labeled "Register," in case the individual has downloaded the application for the initial time. The user will naturally understand that they may do that if they would like to make an account for the first time. When the button is pressed, a routing function is invoked to direct the user to the Register screen. With the exception of obviously the extra fields required to establish an account for the first time, the screen in question will essentially look precisely like the login screen.

In general, I went with a straightforward color scheme and layout. I decided on the typeface Red Hat Mono since it successfully combines contemporary digital design with an industrial sense. This particular hue of blue serves as both the primary motif color for the remainder of the app and as an opposition to the page's additional elements. The navigation bar and other icons for items in the inventory on the main the main screen, in my opinion, will be identical in color. A different one darker complementing blue will be used for other elements that require color. Because the data regarding the inventory is the most important aspect of that, I desire the app's emphasis to be on the data that it provides. Therefore, I believe that using a simple layout will retain the user's attention on the data in question.

I will make sure this particular screen and all of them are constructed with the appropriate limitations for Portrait and Landscape modes in accordance with Android app quality rules. Additionally, I made sure that there was no discernible pixelation, blurring, or deformation of any text or pictures. To readily scale for all screen sizes and orientations, I made sure the logo was an SVG. I took steps to make sure the input fields and buttons were at least 48 dp for accessibility. I made an effort to scale everything correctly on Figma for a Pixel 5 screen, however, I'll make certain the elements are proportioned in the source code. Last but not least, albeit not on Figma, this will allow autofill capabilities for the username and password input areas. The fact that this just needs a minimal amount of information to validate the user and that it is going to be safely saved in the application's internal storage complies with the Data & Documents standards.