1. The Entire Application must support the Auto Layout Concept using Structs and Classes.
2. Initially, the Launch Screen must show the Logo and the Application Title Animation
3. Later, The Application should take to Login and Signup Screen which contains an Image View completely full screen with floating buttons of Login Screen and Signup Screen to perform the respective actions on clicking.
4. In the Login Screen, the user must login after entering the right email and password by what he registered with.
   * The link forgot password must leads to the Reset Password Screen.
   * The link Don’t have an account must lead to the Signup Screen.
   * The Back Button redirects back to the Login & Signup Screen.
5. In the Reset Password Screen, the user enters the Email which is registered for account and then the message must be shown by activating the Resent Mail Link. If the Email is not registered a pop-up must be shown that given Email is not registered to any account.
   * The Back Button to Login must redirect back to Login Screen.
6. In the Signup Screen, the required fields are First Name, Last Name, Email and Password. The user must enters the Email which must be in this format i.e [S######@nwmissouri.edu](mailto:S#) or [######@gmail.com](mailto:#) or [######@outlook.com](mailto:#) or [#######@icloud.com](mailto:##) and the password must satisfy these requirements.
   * *Must At least contains of 8 characters length.*
   * *At least one Upper Case Letter*
   * *Only one Digit from 0-9*
   * *Only one from Special Characters*
     + *(~`! @#$%^&\*()+=\_{}[]\|:;”'?/<>,.)*
   * A pop-up must trigger showing these requirements if fail.
   * *If the user enters the email in the format* [*S######@nwmissouri.edu*](mailto:S#) *then he must enter the 919# Number Field too.*

When the user clicks on the create account button, a pop must be shown that the account is created and next when the user clicks OK, he must enter the Welcome Screen.

1. After successful Login the user leads to the Welcome Screen, the Logo and the Application Title Remains same, but an Image View is added showing the image of the University Name and Background followed by a Get Started button, that leads to the Home Screen.
2. In the Home Screen, the Dashboard is the Main Page which contains the Logo and Application name followed by upcoming events Image View. Including, an Image View which contains Image and Floating Text of Hours below with ending Button Book Now which leads to Gaming Court Slot Availability Screen.
3. In the Gaming Court Slot Availability Screen, the Logo Stays the same changing the name and contains a Calendar to Pick the Date and check the availability of Courts just like Online Ticket Booking.
   * Below the Calendar a View must be placed showing the Courts based on the image type Buttons to specifying the court and game that need to play in it.
   * At the end and Category of list must be placed to notify the colors based on availability, booked, and selected courts.
   * The Back Button must redirect you back to the Home Screen.
   * When clicked on image type Button it must lead to Gaming Court Slot Booking Screen.
4. In Gaming Court Slot Booking Screen, the Logo Stays the same changing the name and selected image type button is highlighted with green color and below a view appears in which the Date is fixed, and time can be modified based on the hours of Recreation Center.
   * If the user contains 919# number, then the Payment is $0.0 but each user can book only once per day up to 4 hours only. A pop must be show if he tried to exceed that.
   * Else if the user doesn’t contain a 919# then the Payment is $10 per hour but each user can book only once per day up to 2 hours only. A pop must be show if he tried to exceed that.
   * Below that Payment method is Apple Pay which is verified by Face ID before done.
   * The Back Button must redirect you back to the Gaming Court Slot Availability Screen.
5. In Booking Confirmation Screen, the Logo Stays the same changing the name followed by Image View that contains Image based on the Court selected for play.
   * Later, the text is displayed stating the Game Name Court Booked.
   * A Table View of details is Displayed relating the following.
     + Court ID
     + Booked For Game Name
     + Date Booking: MM/DD/YYYY
     + Timings – HH:MM PM – HH:MM PM
   * The Button Done must redirect you to Booking History Screen.
6. In Booking History Screen, the Logo Stays the same changing the name followed by a list of Table View of Details after booking.
   * The Latest Booking must be placed on the top of the list View.
7. In Profile Screen, the Logo Stays the same changing the name followed by the fields of Signup Screen.
   * The Button Logout, logouts the user and redirects back to Login & Signup Screen.
   * The Edit button enables the user to edit the details and Save Button does saving.
   * If the user wants to change the mail from ####@gmail.com to S######@nwmissouri.edu then he must enter the 919# Number too and confirm password.
   * If the user needs to change the password, he needs to enter the current password and new password and reenter the new password and click Enter.
     + A pop-up must appear if the current password is incorrect.
     + A pop-up must appear if the new Passwords don’t match or pass requirements.
     + A pop-up must appear if the password change is done successfully.

**Application Working Process**

**Launch Screen**

Graphical user interface, application

Description automatically generated

Shows the Logo and Application Title on App Launch

**Login and Signup Screen**

Graphical user interface, application

Description automatically generated

An Image Viewing the Recreation Center Area

Directs to Login Screen

Directs to Signup Screen

**Login Screen**

Graphical user interface, application

Description automatically generated

Redirects to Signup Screen

Directs to Reset Password Screen

Directs to Welcome Screen

Enter the Password of your Account!

Here you need to Enter the Student ID E-Mail

S######@nwmissouri.eduu

Redirects back to Login and Signup Screen

**Reset Password Screen**

Here you need to enter the E-Mail address you had account with created with.

Graphical user interface, application

Description automatically generated

Resents the Email with Your Previous Password to Login with secure PIN.

Displays after

pressing Enter by giving E-mail Address

Redirects back to Login Screen

**SignUp Screen**

Graphical user interface, application

Description automatically generated

* Contains of 8 characters length
* At least one Upper Case Letter
* Only one Digit from 0-9
* Only one from Special Characters

(~`! @#$%^&\*()+=\_{}[]\|:;”'?/<>,.)

Redirects back to Signup Screen

Directs back to Login and Signup Screen

Here you need to enter the Full Name in the given fields.

Here you need to enter the E-Mail address and 919#

Redirects back to Login and Signup Screen

**Welcome Screen After**

**Signup and Login**

Graphical user interface, application

Description automatically generated

An Image Viewing the NWMSU Title Logo with Admin Building in Background

Redirects to Home Screen

Shows the Logo and Application Title

**Home Screen**

A screenshot of a cell phone

Description automatically generated with medium confidence

An Image Viewing the Timing Hours in Recreation Center

Click on this Button which redirects to Booking History Screen with latest bookings on top first.

Click on this Button which redirects you to Gaming Court Slot Booking

Availability Screen

Click on this Button which redirects to Profile Screen

An Image Viewing the Upcoming Events in Recreation Center

**Gaming Court Slot Booking**

**Availability Screen**

Graphical user interface, application

Description automatically generated

These represents the court slots which are available (Black), selected (Green) and which are booked (Red) on the day of that month.

This is Calendar to check the Availability of Slot on that day of that Month.

This just represents the check-in at the Recreation Center

Click on this Button which redirects to Home Screen

**Gaming Court Slot**

**Booking Screen**

Graphical user interface, application

Description automatically generated

As all the Students are allowed to use their bearcat ID for all NWMSU Services

This requires a verification of Face ID for payment Process by clicking on Power Button

Click on this Button which enables the payments method with time duration and date.

Click on this Button which redirects Gaming Court Slot Booking

Availability Screen

**Booking Confirmation**

**Screen**

Graphical user interface, application

Description automatically generated

This is View of Content which consists of Court ID, Booked for Game, Date Booked and the Timings.

An Image Viewing the Game for which the Slot is booked.

This Button saves the Booking of the Slot and redirects to Booking History.

**Booking History Screen**

Graphical user interface, application

Description automatically generated

Clicking on this Button directs to Booking History Screen

The Latest Booking is Viewed in the top of Booking History Screen

These are the previous list of bookings at Gaming Court Slots

**Profile Screen**

Graphical user interface, application

Description automatically generated

To Change the Password the user, need to click enter after completing the new password.

Clicking on this Button saves the users updated details.

Clicking on this Button enables user to edit details.

Clicking on this Button logouts user and directs to Login and Signup Screen

Read the Data File for Required Data and Other Information. \*\*\*Proceed with the Other Color changes and Animations but don’t need to build like a professional Application. Just The Features like getting notifications, CRUD Operations, Face ID, Booking and Payments, getting mails, Mail after Booking Confirmation need to work. \*\*\*