JANUARY 2023 SEMESTER

TEB1043: OBJECT ORIENTED PROGRAMMING

GROUP ASSIGNMENT

JAVA ANDROID APPLICATION PROPOSAL

FITNESS AND HEALTHCARE APPLICATION (FITNICELY)

TEAM ORGANIZATION:

GROUP MEMBERS	
NURUL NADZIFAH BINTI MUHAMMED ALWEE	21001018
ATHILAH KAMILIA BINTI ADLAN	21001081
ANIS SOFEA BINTI HADZLAN	21001134
NURUL IZZAH BINTI ROSMAN	21001147
SHARIFAH HAFIZAH BINTI SYED HASHIM	21001103
TENGKU NUR AIDATUL NABIHAH BINTI TENGKU BRAHANUDIN @ TENGKU KHALID	21001238
FILZAH IRDINA BINTI MOHD HISYAM AFANDI	21001752

COURSE: COMPUTER SCIENCE

LECTURER: DR. NORDIN ZAKARIA

VIDEO PRESENTATION LINK : https://youtu.be/GMIGLC-otUM

PROJECT DESCRIPTION

PROBLEM STATEMENT

Many users are required to use multiple applications to manage, track and update their fitness journey including exercise, and diet regularly. Due to this, all these applications might take up a lot of space in their storage. Moreover, the users need to spend a long time updating their fitness progress in each application every day.

SOLUTION: FITNICELY (FITNESS AND HEALTHCARE APPLICATION)

Proposed applications

From User perspective

We aspire to develop a mobile application that compiles many different features which helps the user to manage and develop the habit of living a healthy lifestyle. The application will include features such as:

1. A section where it guides the user to try various types of exercises in different levels depending on the criteria (difficulty).
2. An quote section where the user can gain more knowledge related to fitness, healthcare, and diet and get inspired from it.
3. Search bar that allows the user to search for certain keywords related to the exercises/workout.

From Admin perspective

1. Admin able to update, delete, add and display the current list of keywords for the search bar in user interface
2. Admin able to update, delete, add and display the current list of the interesting facts that displayed in the user interface

Fitnicely functionality

   a. User's point of view
   1. Sign Up - New users' registration details to be our official user
   2. Existing login verification – users need to login to further use our apps while our apps will validate the username and passwords input by the user with the database upon finishing signing up.
   3. Type of exercise – made available for the users' view where they can choose the video made available for them to follow according to the level of difficulty they wish.
   4. Main Page - Fitnicely displays daily quotes for our users' motivation. All of the daily quotes stored in ArrayList to make the display enable to the users.
   5. Side bar in Main Page - consists of the Home button for retrieving the user back to the Main Page/ Home Page, Search button which direct the user to Search Page where they can search for any exercise or level they wish for while in the Side Bar

from our Main Page, our apps have the Profile button where the user may see the details that they have registered before proceeding using the apps further.

6. Logout - If the user wishes to logout to their account, the user may find the logout button through the Profile Page.

b. Admin's point of view

1. Admin Login – Admin must input the correct username and password to be able to connect to the Main Page for Admin. From the login, page, a verification will be made as the admin have the same username and password for viewing and editing the application for updates.

2. Admin Page – After the successful login, admin will be directed here for the next algorithm.

3. Update Random Facts – Admin may input quotes to add in the quotes for the daily quotes for the user's view. Admin also may delete quotes as well.

4. Update Search – Admin may add in any keyword that the user may input when searching for anything that they wish.

UML Class Diagram

quotesUpdate
- + UserInput: String
- + getQuote(): String

profileUser
- - name: String()
- - phoneNumber: String()
- - email: String()
- - username: String()
- - password: String()
- - DB_URL:String()
- - DB_USER: String()
- - DB_PASSWORD: String()
- - user_id: String()
- + Database(): void
- + main: void
- +Logout()

Type Of User
- - userType: int
- + userType(): int

LoginUser
- - username: String
- - password: String
- + DB_URL: String = "jdbc:mysql://db4free.net:3306/fitnicely"
- + DB_USER: String ="fitnicelyadmin"
- + DB_PASSWORD: String ="Fitnicelypwd11"
- onCreate(savedInstanceState: Bundle): void
- + Access(): void
- + validateUser(username: String, password: String): void

LoginAdmin
- - username: String
- - password: String
- + USERNAMEADMIN: String = "fitnicelyadmin"
- +PASSWORDADMIN: String = "Fitnicelypwd11"
- onCreate(savedInstanceState: Bundle): void
- + Access(): void
- + validateAdmin(username: String, password: String): void

AdminPage
- + verifyLogin ()
- + updateQuestion(): String
- + updateInformationList(): String

QuotesInformation
- # quotesList: ArrayList<String>
- + quotesInformation()
- + displayQuotesList(quote:String): String
- + updateQuotes(quote: String): void
- + removeQuotes(quote: String): void
- + getQuotesList(): ArrayList<String>
- + getRandomElement(): String

SignUpUser
- - name: String
- - email: String
- - phone: String
- - username: String
- - password: String
- + SignUpUser()
- + userInput(): void
- + Database(name:String, email:String, phone:String, username:String, password:String): void
- - isValidEmail(name: String): boolean
- - isValidPhoneNum(phoneNumber: String): boolean

AdditionalInformationUpdate
- +InformationList: ArrayList<String>
- +List()
- +getList()
- +removeList()

NavigationUpdate
- -ans : int
- -key : String
- -getSelection(): void

PilatesPage
- pilates_easy : PilatesData
- pilates_intermediate : PilatesData
- pilates_expert : PilatesData
- onCreate(savedInstanceState: Bundle): void

MainPage1
- binding : ActivityMainPage1Binding
- quotes :quotesInformation
- textView: TextView
- randomQuote: String
- + setText (randomQuote: String)

SearchBar
- binding : ActivityMainPage1Binding
- navigation : Navigation
- OnCreate(savedInstance : Bundle): void

Navigation
- - videoKeywords: ArrayList<String>
- - navigationKeyword: ArrayList<String>
- +setInitialVideoKeyword(): void
- +setInitialNavigationKeyword(): void
- +findNavigation(searchFeatures: String): Boolean
- +removeKeyword(key: String, ans: int): void
- +updateKeyword(key: String, ans: int): void
- +displayList(): String

PilatesData
- +playVidEasy(findView : VideoView, uri : String, md: MediaController)
- +playVidIntermediate(findView : VideoView, uri : String, md: MediaController)
- +playVidExpert(findView : VideoView, uri : String, md: MediaController)

ZumbaPage
- zumba_easy : ZumbaData
- zumba_intermediate : ZumbaData
- zumba_expert : ZumbaData
- onCreate(savedInstanceState: Bundle): void

YogaPage
- yoga_easy : YogaData
- yoga_intermediate : YogaData
- yoga_expert : YogaData
- onCreate(savedInstanceState: Bundle): void

ZumbaData
- +playVidEasy(findView : VideoView, uri : String, md: MediaController)
- +playVidIntermediate(findView : VideoView, uri : String, md: MediaController)
- +playVidExpert(findView : VideoView, uri : String, md: MediaController)

YogaData
- - url_easy: String
- - dataUrl_easy: String
- - url_intermediate: String
- - dataUrl: String
- - url_expert: String
- - dataUrl_exp: String
- +playVidEasy(findView : WebView)
- +playVidInter(findView : WebView)
- +playVidExp(findView : WebView)

Keyword
- +setInitialVideoKeyword(): void
- +setInitialNaviKeyword(): void
- +findNavigation(searchFeatures : String) : Boolean
- +displayList(); String
- +removeKeyword(key: String, ans: int): void
- +updateKeyword(key: String, ans: int): void