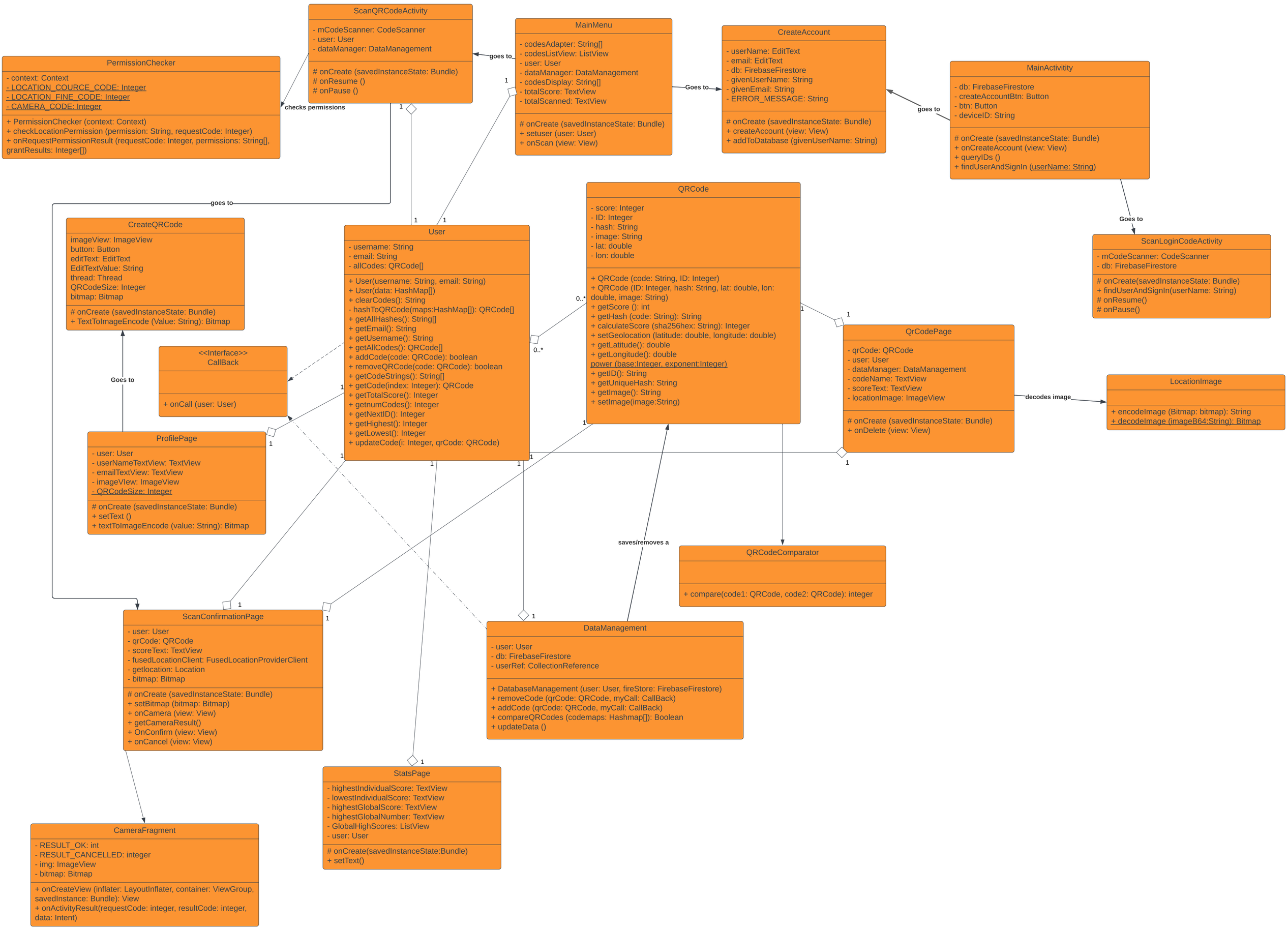
UML Diagram


ScanQRCodeActivity
- mCodeScanner: CodeScanner
- user: User
- dataManager: DataManagement
onCreate (savedInstanceState: Bundle)
onResume ()
onPause ()
goes to
MainMenu
- codesAdapter: String[]
- codesListView: ListView
- user: User
- dataManager: DataManagement
- codesDisplay: String[]
- totalScore: TextView
- totalScanned: TextView
onCreate (savedInstanceState: Bundle)
+ setuser (user: User)
+ onScan (view: View)
Goes to
CreateAccount
- userName: EditText
- email: EditText
- db: FirebaseFirestore
- givenUserName: String
- givenEmail: String
- ERROR_MESSAGE: String
onCreate (savedInstanceState: Bundle)
+ createAccount (view: View)
+ addToDatabase (givenUserName: String)
goes to
MainActivitity
- db: FirebaseFirestore
- createAccountBtn: Button
- btn: Button
- deviceID: String
onCreate (savedInstanceState: Bundle)
+ onCreateAccount (view: View)
+ queryIDs ()
+ findUserAndSignIn (userName: String)
Goes to
ScanLoginCodeActivity
- mCodeScanner: CodeScanner
- db: FirebaseFirestore
onCreate(savedInstanceState: Bundle)
+ findUserAndSignIn(userName: String)
# onResume()
# onPause()
PermissionChecker
- context: Context
- LOCATION_COURCE_CODE: Integer
- LOCATION_FINE_CODE: Integer
- CAMERA_CODE: Integer
+ PermissionChecker (context: Context)
+ checkLocationPermission (permission: String, requestCode: Integer)
+ onRequestPermissionResult (requestCode: Integer, permissions: String[], grantResults: Integer[])
checks permissions
goes to
CreateQRCode
imageView: ImageView
button: Button
editText: EditText
EditTextValue: String
thread: Thread
QRCodeSize: Integer
bitmap: Bitmap
onCreate (savedInstanceState: Bundle)
+ TextToImageEncode (Value: String): Bitmap
User
- username: String
- email: String
- allCodes: QRCode[]
+ User(username: String, email: String)
+ User(data: HashMap[])
+ clearCodes(): String
- hashToQRCode(maps:HashMap[]): QRCode[]
+ getAllHashes(): String[]
+ getEmail(): String
+ getUsername(): String
+ getAllCodes(): QRCode[]
+ addCode(code: QRCode): boolean
+ removeQRCode(code: QRCode): boolean
+ getCodeStrings(): String[]
+ getCode(index: Integer): QRCode
+ getTotalScore(): Integer
+ getnumCodes(): Integer
+ getNextID(): Integer
+ getHighest(): Integer
+ getLowest(): Integer
+ updateCode(i: Integer, qrCode: QRCode)
QRCode
- score: Integer
- ID: Integer
- hash: String
- image: String
- lat: double
- lon: double
+ QRCode (code: String, ID: Integer)
+ QRCode (ID: Integer, hash: String, lat: double, lon: double, image: String)
+ getScore (): int
+ getHash (code: String): String
+ calculateScore (sha256hex: String): Integer
+ setGeolocation (latitude: double, longitude: double)
+ getLatitude(): double
+ getLongitude(): double
power (base:Integer, exponent:Integer)
+ getID(): String
+ getUniqueHash: String
+ getImage(): String
+ setImage(image:String)
0..*
0..*
QrCodePage
- qrCode: QRCode
- user: User
- dataManager: DataManagement
- codeName: TextView
- scoreText: TextView
- locationImage: ImageView
onCreate (savedInstanceState: Bundle)
+ onDelete (view: View)
decodes image
LocationImage
+ encodeImage (Bitmap: bitmap): String
+ decodeImage (imageB64:String): Bitmap
Goes to
<<Interface>>
CallBack
+ onCall (user: User)
ProfilePage
- user: User
- userNameTextView: TextView
- emailTextView: TextView
- imageVIew: ImageView
- QRCodeSize: Integer
onCreate (savedInstanceState: Bundle)
+ setText ()
+ textToImageEncode (value: String): Bitmap
saves/removes a
QRCodeComparator
+ compare(code1: QRCode, code2: QRCode): integer
ScanConfirmationPage
- user: User
- qrCode: QRCode
- scoreText: TextView
- fusedLocationClient: FusedLocationProviderClient
- getlocation: Location
- bitmap: Bitmap
onCreate (savedInstanceState: Bundle)
+ setBitmap (bitmap: Bitmap)
+ onCamera (view: View)
+ getCameraResult()
+ OnConfirm (view: View)
+ onCancel (view: View)
DataManagement
- user: User
- db: FirebaseFirestore
- userRef: CollectionReference
+ DatabaseManagement (user: User, fireStore: FirebaseFirestore)
+ removeCode (qrCode: QRCode, myCall: CallBack)
+ addCode (qrCode: QRCode, myCall: CallBack)
+ compareQRCodes (codemaps: Hashmap[]): Boolean
+ updateData ()
StatsPage
- highestIndividualScore: TextView
- lowestIndividualScore: TextView
- highestGlobalScore: TextView
- highestGlobalNumber: TextView
- GlobalHighScores: ListView
- user: User
onCreate(savedInstanceState:Bundle)
+ setText()
CameraFragment
- RESULT_OK: int
- RESULT_CANCELLED: integer
- img: ImageView
- bitmap: Bitmap
+ onCreateView (inflater: LayoutInflater, container: ViewGroup, savedInstance: Bundle): View
+ onActivityResult(requestCode: integer, resultCode: integer, data: Intent)