# G1 Rules Expert

# Implementation Phase

**END DATE:-**

28<sup>th</sup> Aug. 2020

**SUBMITTED TO:-**

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# Specification Vs Realization......

These are features that we mentioned in the specification phase:

### □ See his/her profile

In the menu bar there is option to see the profile. So, user can see his/her profile as well as can edit the profile by changing date of birth, email id and etc.

### See quiz

User can see the quiz. Basically, there are four quiz's based on easy and hard questions. Every quiz have 20 questions.

### Sign board

In the quiz, there are different sign boards, so that user can know about the meaning of different sign boards.

#### □ FAQ

Also, Frequently answers questions are there. So, User can know more about the app by reading these questions.

### Challenge bank

There will be also a challenge bank. If user don't have enough time enough time to complete a quiz then they can choose challenge bank. In this 4 questions are available each time randomly 4 questions come in the challenge bank.

### Score page

Moreover, user can see their performance on the score board. They can see the obtained marks out of total marks.

# Change theme (light & dark mode)

Users can change the theme, like dark or light mode according to their interest.

#### Localization

To make better connection with customers, this app is providing the features of localization, so that User can select the language for quiz like Punjabi, English and French.

<u>Earlier, we were thinking about adding more languages, but then we decided to add only those languages which are most commonly spoken by the people living in Ontario.</u>

# Tools and Technology...

### 

- Android SDK
- Google Translator
- Firebase

# □ Technology

- Android
- Room database
- Realtime database



# Testing



### Performed Manual Testing –

Every day the team member working on the project delivered a logically completed product to the each other and they would run their test cases on the build.

- Regression was a challenge because in each build each member had to ensure that previously completed items were still working.
- We used JIRA to file and track defects.

# Beta Testing-



- Beta Testing After this initial setup, user acceptance testing was conducted.
- This was achieved by asking the beta users (our friends) to browse every single page within the mobile app.
- ☐ This ensured that every bug was fixed before the app was released.
- And that the app captured all necessary features and functionality.

# Performance Testing

- □ Performance Testing –
- ☐ The functionality, performance
- stability,
- responsiveness,
- resource usage,
- stability parameters as per standards) and
- user interface for the delivered build was thoroughly tested.



# Experimental and Validation Results

- The application is working correctly functionality wise.
- ☐ The user is successfully able to register or login into the application
- □ But to perform the quiz, the user is required to have internet connection after he/she login in into the application.
- User can navigate to different pages of the application by clicking menuicon
- Navigation Drawer is provided
- After that, the user can either perform the quizzes or can opt for the challenge bank if there is shortage of time,

# Implementation....

Applications screen layouts:-

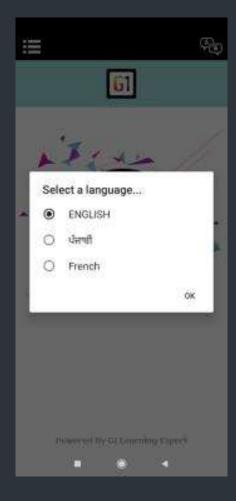
Splash screen



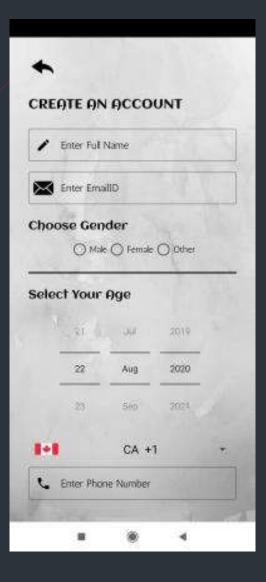
**Front Screen** 



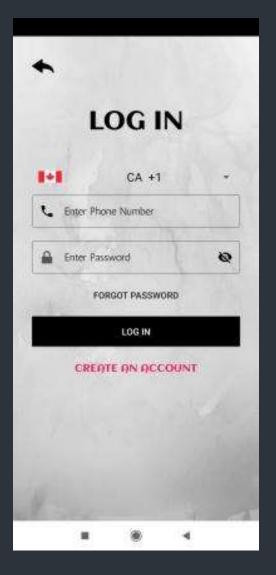
### **Choose language**



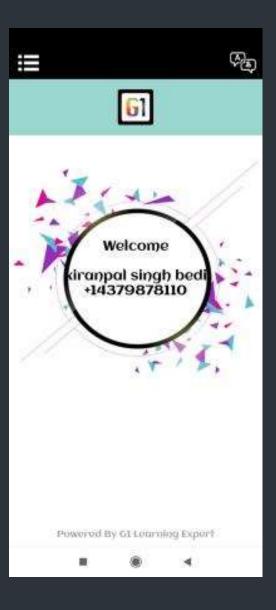
# Register page



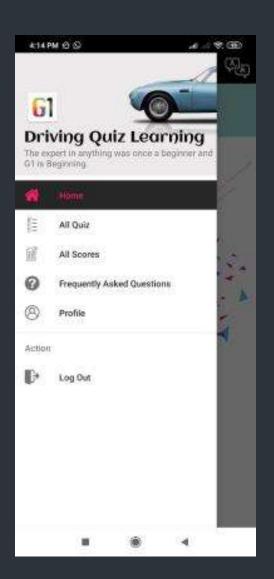
# Login page



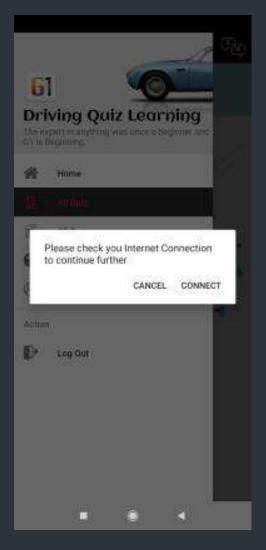
#### **Welcome Screen**



#### Menu



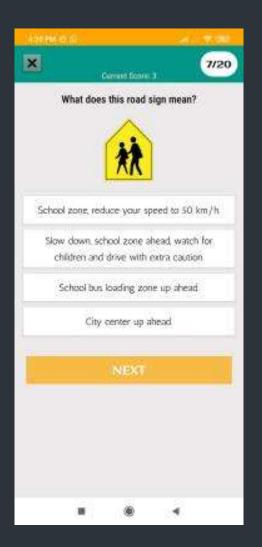
### **Connect to WIFI alert**



#### **All Quiz**

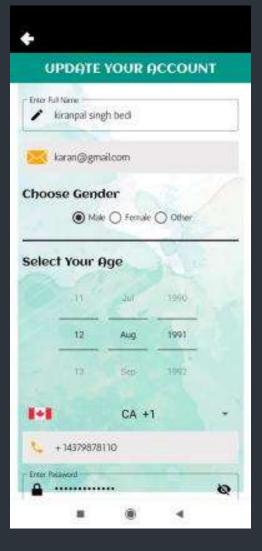


# Sign Boards





### Profile page



#### **FAQ**



#### FREQUENTLY ASKED QUESTIONS

#### 1. What is a G1 license?

G1 is the first step in Ontario's graduated licensing system. It allows you to practice your driving skills with a supervising licensed driver who has held a G license for at least 4 years. They must sit in the front seat with you at all times.

 Are there any specific documents I should have when I go to take my written test in Optavis?

Yes. When you go in to apply for your license, you are required to have documents that show your

- Legal Name
- Date of Birth
- Original Signature

These can be documents such as a Passport (Canadian or Foreign), Canadian citizenship card with photo, Ontario Photo card, Employee/ Student Authorization Form, or etc.

#### 3. How much does a G1 license cost?

The G1 license package costs \$158.25. This includes \$15.75 for the knowledge test, \$52.50 for the Class G2 Road Test, and \$90.00 for the

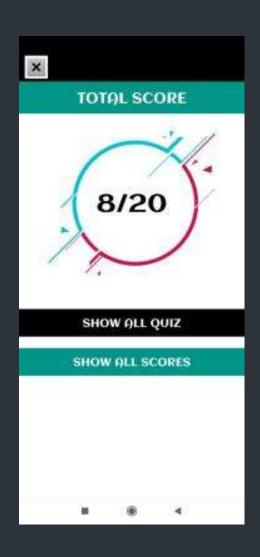






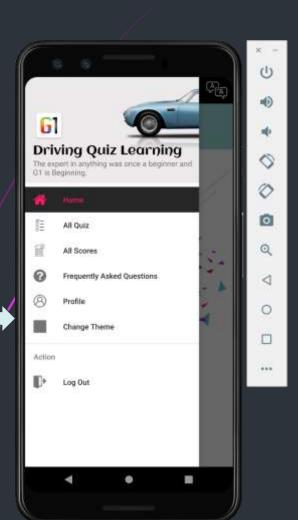
# Score board

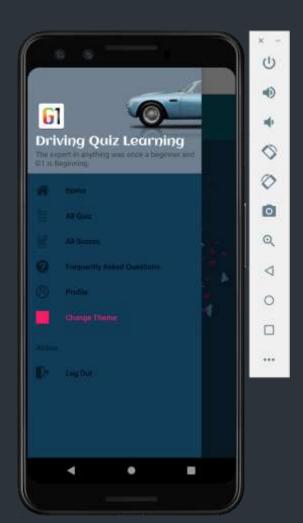
#### **All Scores**





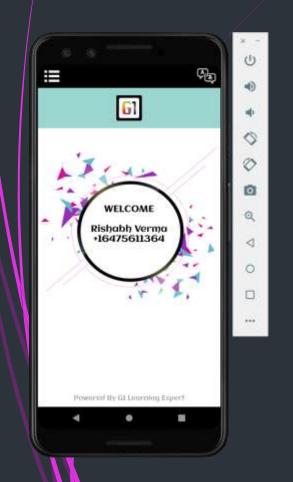
### Mode Independence : Night and Light mode







# Data Persistence









# Connectivity to Room Database

### Reason behind data persistence is RoomDB

- The data is stored on cloud (FireBase) as well as locally so that the user gets the better UX.
- User is no more required to login into the app every time he/she takes his/her tie off.
- ☐ This saves time as well as the efforts of user to get access of his or her account.
- User gets more freedom to close and open the app on the go from the same page he or she left at.

ROOM PERSISTENCE LIBRARY

# Connectivity to Firebase



Application is equipped with the capability of storing the data over the cloud.

- As we all know the cloud is future of storing data.
- This is could make everything a lot more easier and feasible for the user as well as developer to make the app a better place to get indulged.
- ☐ For developer it is easier to get the admin control for the app and moreover making changes are better as well.
- From the User point of view it gives more reliability to get fetch and receive the data from the cloud storage as compared to local.

# Localization : Language Independence



Learning a new concept in own language can make it more effective and efficient to grasp it.

- We have made this app capable of operating in to three most spoken language in Canada (especially Toronto region): English, French and Punjabi.
- Localization gives the user an independence of choosing the way of learning they want according to their intellect.

# Conclusion

- □ Free App
- Easy to use
- Evergreen
- □ Large no of users can use this app because of "Change Language" option

# Bibliography

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