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An app for PUBG Mobile Tournaments

¹Satyam Rawat , ²Nirmal Kunwar , ³Krishnakant Patel , ⁴Kewal Krishan Gaur , ⁵Pushpendra Tripathi , ⁶Sheveta Vashisht

^{1,2,3,4,5}Department of Computer Science Engineering, Lovely Professional University
Phagwara, Punjab, India

⁶Assistant Professor, Department of Computer Science Engineering, Lovely Professional University
Phagwara, Punjab, India

Abstract: The PUBG Mobile Tournament app is an android application which is intended to conduct tournaments on the popular multiplayer mobile game, PUBG mobile. The app allows the players to win real money if they win top three place in a match. This app also allows the players to win real money as per the kills in a particular match. Using the application, the users can link their PUBG accounts to their app profiles. They can also create temporary teams, in which they can add one or more players, generally their game friends, to play as a duo or squad. After winning a match, the players can send the screenshots as a proof of their win, to claim the prize money, which is updated in their account as coins and can be redeemed anytime. Alternatively, the coins can be used to play another premium tournament.

Keywords - Android, PUBG mobile Tournament, Coins and Premium Tournaments.

I. INTRODUCTION

This app allows the players who play the mobile game PUBG mobile to participate in tournaments. The tournaments can either be app-sponsored, where the players can join for free, or be 'Premium Tournaments', where players have to play a small fee to participate. The tournaments are of Battle Royale style, which can be one of the three possible types.

- Single Player Tournament
- Two-man Duo Tournament
- Four-man Squad Tournament

Esport is termed as electronic sport. It is a game played online over a network between teams or it can also be played individually. Over the years eSports is becoming popular around the world. Esport is engaging more players and spectators. This continuous popularity and development in eSports among the youth is responsible for birth of online gaming tournament.[1]

Esport or electronic sport is a platform that gives recognition to the best players around the world, who play exceptionally well in the games. Some of them have shaken the entire esports industry like: Shroud, Dr Disrespect, Ninja etc. on a Worldwide Scale. There are many famous Indian esports gamers also, like: Mortal, Dynamo, V3nom, Psy etc. It is all because of their exceptionally great performance in the esports. Just like physical games, this Professional gaming has fans, superstars and prizes. This online gaming industry is getting bigger day by day.[2]

This app for PUBG Mobile Tournament can be played professionally and the winners earn a good amount of money, others get paid according to their individual performance. So many great talents are there in every corner of the India, who have extreme potential like them but they do not get opportunities. Most importantly they cannot attend those esports challenges because of money problem. They cannot afford that. So, with our app we are trying to help them.

The fee for joining the squad tournaments is intended to be a little higher than the single player tournament and increases proportionally with the reward amount. A single player can play as a solo-squad and will be forced to face full two-man, or four-man squads in exchange for the greater reward squad-based matches will have.

Tournament mechanics, in section II. App economy related Features, in section III. Describing Teams feature, in section IV. Features of the application are described in section V. Hardware and software requirements are listed in section VI. System design is described in section VII. Detailed description of workflow is provided in section VIII. Conclusion is provided in section IX.

II. TOURNAMENT MECHANICS

In the game PUBG mobile, the tournaments are conducted by a player (Host), who creates a game room – a separate lobby where players can join. The host will determine the various settings of the tournament, like, the location, speed of circles, item drop rates from the main screen of the tournament in the game.

It has been experienced in many online games that some player cheats to win the match. Those players use some cheat code or malware files to hack and modify the functionality of the game. Those cheater enhances the strength of the player, increases the fire power of the guns and many more. This types of hackers or cheaters breaks the rules established in the game or application community.[3] He/she can also monitor the activity of any player in a third-person view while a match is in progress, this will help in monitoring hackers in the game. Anti-cheating measures are enforced by the hosts viewing monitoring the match.

The players can join a tournament lobby by entering the Room's ID and password, which is determined by the host. The credentials are conveyed to the participating players through email or SMS.

If a team wins, the prize amount is credit to the team leader's account.

III. APP ECONOMY

The app has its own currency called coins, which are replenished by adding real money, or by playing app sponsored free-to-play tournaments. The coins are redeemed as money or alternatively used to play premium tournaments.

As the app is based for Indian people, the value of coins and INR is in ratio 1:1. Upon winning a squad based tournament, the coins are credited to the team leader's account, who can then split them up within the team. Same is for winning a two-man duo based tournament, the coins are credited to the team leader's account, who can then split them up with each other.

IV. TEAMS

A team is created by a player, by entering his name and In-game ID (player number). In doing so, he is automatically assigned the leader position. To add more players in his team he must enter the name and Game ID of his teammates.

The match entry fee for squad tournaments is on team basis, and not per-head. It can be expected to be 20-30% higher than single player tournament fee.

It's worth mentioning that a player participating in a team match can accidentally match with the wrong player squad, and once the match starts, he will be forced to play in that team. If that team wins, the team leader will get the prize amount, and it will be upon his wish, if he intends to reward the mistakenly joined ally or not.

V. A REVISION OF THE APP FEATURES

1. Details of total matches played and every match result.
2. Details of total money won in all matches.
3. Interesting UI – easy to use, interactive, simple navigation.[4]
4. Online wallet, debit card support for payment – convenient and simple platform.[4]
5. This app has feature to refer and earn – user can earn coins by referring this app link to a friend.

VI. SYSTEM REQUIREMENTS

1. **Minimum system software requirements for PUBG mobile tournament app is –**
 - 1.1 Android Version 6.0 or more.
2. **Minimum system hardware requirements for PUBG mobile tournament app is -**
 - 2.1 1.8 Ghz Processor
 - 2.2 2 GB or more RAM memory.
 - 2.3 A medium or faster working Internet Connection.
 - 2.4 24 GB or more ROM memory.
 - 2.5 3000 mAh Battery backup

VII. SYSTEM DESIGN

- A. **Login Screen:** This is the very first screen the user comes across. Its objective is to login the user. However, a new user can create a new account from the bottom button. In this page user can change their password if they do not remember it. This login screen page is shown in figure 1.
- B. **Create User Activity:** This activity takes the username, password, email and mobile number of a user as an input and creates a new account of the user. In this page user can also paste a referral code of a friend to get free coins. This user register page is shown in figure 2.
- Additionally, a promo code feature is also provided to give coins to the invited users.
- C. **Profile Screen:** This screen shows the user details, his current balance in the app, matches played, total kills and total money he has won. The user can update their profile by clicking edit profile button. He can also choose to share the app with friends via various social media apps. This is shown in figure 3.

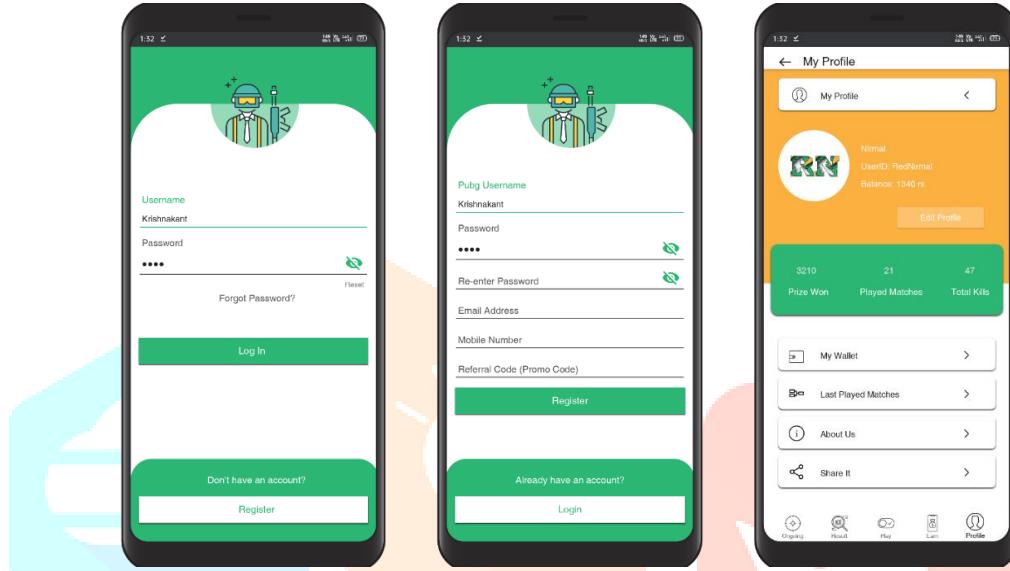


Figure 1: Login Screen

Figure 2: Create User Activity

Figure 3: Profile Screen

- D. **Share App Link Screen:** This screen allows a user to share the app link with his friends. A referral code is also shared alongside the app link, which the new user can enter while creating an account. This will give a small number of coins to both the users. This is shown in figure number 4.
- E. **Find Match Screen:** This screen shows a list of upcoming matches the user can participate in coming days. It shows the details like how much is entry fee of particular match, match type (solo, duo, squad), map, prize and additional money the players will get per kill. This screen is shown in figure number 5.
- F. **Match Result Screen:** After a match ends, the performance of the user in a match will be uploaded onto this page within two hours. This match result screen also displays the prize money he has won. This match result page is shown in the figure number 6.

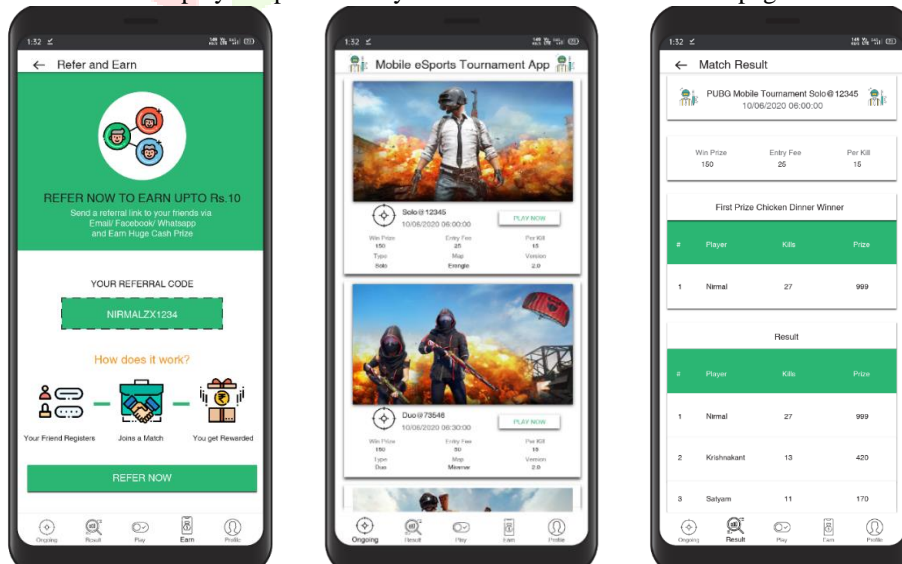


Figure 4: Share App Link

Figure 5: Find Match Screen

Figure 6: Match Result Screen

VIII. APP WORKFLOW

The level 1 is for the admin privilege users who can use the app to login, schedule and manage the data. The login stage uses the auth function of firebase to simplify the process of authenticating the user. Once the admin is logged in, he can either choose to manage the upcoming matches or manage the data that is collected. It should be noted that the Match Schedule stage uses the Firebase Database module. Admin can log out of the app at any stage. This is shown in figure 7.

Level 1:

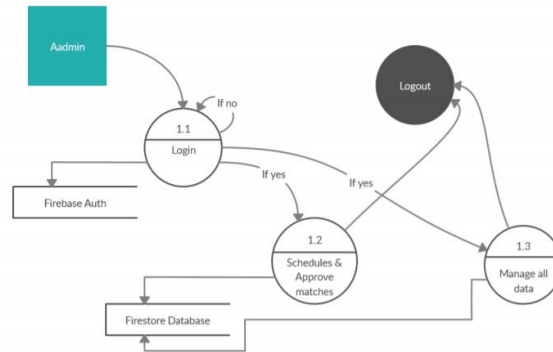


Figure 7: Level 1 Data Flow Diagram

The Level 2 workflow, which is for the general user, uses the same Firebase auth module to authenticate and log in the user. After passing that stage, the user can choose to participate in matches by searching or browsing them, View his profile to make changes to his or team information and to add new teams, or manage his in-app wallet to add or withdraw money. All these stages use the Firebase Database to manage user data. The user can Log out from the app at any stage. This is shown in figure 8.

Level 2:

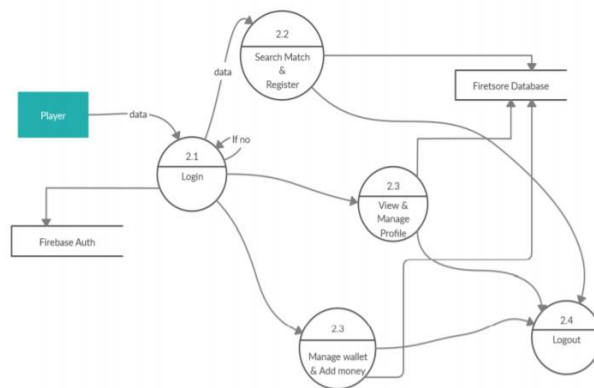


Figure 8: Level 2 Data Flow Diagram

IX. CONCLUSION

There are large number of people around the world who are playing multiplayer online games every day.[5] PUBG mobile is an emerging game with more than 50 million players worldwide. With such a huge player base, the players are constantly looking for a challenge to feel the rush, and to level up their skills to be the best. The tournaments are proven to be the best way to do so.

Therefore, an app like the PUBG tournament app has a very high feasibility, and it can be extended to support may other online games in future.

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