**DROID-RUSH**

**1st Round Problem Statements**

**First Year**

**1. Reminder Notification [extended]**

Create an app that allows you to set reminders for your needs. The app should show notification for the reminders during the set time.

**Features**

* Add reminders of things to do
* Add date and time for the notification to set off
* On touching the notification, the notification should be deleted

**2. Alarm Clock**

Wake up! Create an alarm clock app that shows the current time in the main screen and allows you to add alarms for a specific date and time.

**Features**

* Show current date and time
* Add alarm by specifying a date and time
* App should set off alarm with a ringtone and vibration at the specified time
* Add snooze option to the alarming dialog

**3. Inverse Matrix Calculator**

Remember exhausting your minds to find the inverse of hideous matrices? Now make your mobile do that mundane task and chill out instead. Create an app that will calculate and show the inverse of the given matrix.

**Features**

* Take size of square matrix (min. 2, max. 4)
* Input the matrix and fill it.
* Calculate the inverse, and voila! Show it to the user.
* Ask user if to repeat.

**4. Calculator**

This is the one that everyone wishes to do at least once. Design your own calculator adding your own functionalities in addition to the basic division, multiplication, addition, subtraction, percentage etc. operations. Extra emphasis will be given to the functionalities and the design that you add.

**5. Tip Calculator**

If there service was great, it’s appreciable to tip. But how much? Not to worry, there’s an app for that. Create an app that calculates the tip for a given bill and also allows to split bill between friends.

**Features**

* Take the amount of bill and the percentage to tip
* Provide the amount to tip
* Also take number of people to split the bill between
* Give the amount each one has to pay
* The emphasis would be on the UI elements used to design the app

**6. Open Project**

Have an idea? Show us! Apart from the above problems, you can also implement any idea of your own. However, you would be required to mention the aims and features of your app in your abstract submission. Also, keep in mind that your submission will be judged on the basis of the quality of the idea that you have implemented and the practical usage of your app.

**Second/Third Year**

**1. Finance Management [extended]**

Create a finance management app that helps you manage your daily expenses. You need to enter the limit of expense you plan to spend on various things by adding credit/allowance.

**Features**

* Add allowance/credit to your account
* Update balance each time you make an expense
* Display list(s) of all the expenses and all the incomes
* Show remaining balance for the day and month
* When you exceed the limit any time, the app should issue a warning

**2. Wid U [Extended]**

Of late one of the major social issues is women's safety which is at stake. They are prone to heinous attacks when outside home. And so are children and senior citizens. A smartphone in your pocket can come to your rescue when trapped in danger just by a click.

**Features**

* Add 5 people who you want to contact in case of emergency.
* Allow to modify the list of people later on.
* Show an emergency button which when tapped sends a distress message to the above listed people along with your last recorded GPS location.
* Extra points for additional features.

**3. Brain Matrix**

Unleash the power of your mind through a classic match-making memory game using pattern matching. Let’s see how much you can remember!

**Features**

* The app shows a 4x4, 6x6 or 8x8 grid, containing pair of images in random positions.
* At start, the images are shown for a few moment.
* Subsequently, the pictures are flipped face down.
* Now clicking on any cell reveals the hidden picture. Now you have to click another cell to match with its pair.
* In case of mismatch, both cells are flipped face down again, hiding the images.
* In case of match, the pictures become fixed and appear permanently.
* The game is finished when all the pictures are revealed.
* You can add your own features e.g. leaderboard, multi-player, timer, levels etc. to earn extra points.

**4. Notes App [Extended]**

Create an app to make notes. Sounds simple, huh. We’ll see!

**Features**

* User should be able to add a note
* Every note has a heading and a Content
* User should be able to delete an old note
* Notes can be sorted according to time or/and heading

**5. The College App[extended]**

An app for college students for managing their attendance and classes. Now that is an app everyone deserve, and everyone need.

**Features**

On the first run, the app takes information of all your subjects and the classes this semester like which classes will be held when and where. Maintain a database of all these classes.

**6. Open Project**

Have an idea? Show us! Apart from the above problems, you can also implement any idea of your own. However, you would be required to mention the aims and features of your app in your abstract submission. Also, keep in mind that your submission will be judged on the basis of the quality of the idea that you have implemented and the practical usage of your app.