

こんにちば

PROBLEM STATEMENTS

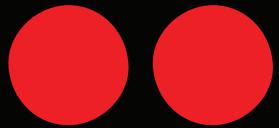
2022  
DROIDRUSH



MEDIA  
HOUSE  
MNNT



# **RULES & REGULATIONS**



Before you start developing awesome apps, have a look at the rules and regulations so that you don't end up with disqualification.

1. This is a team event of maximum 3 members. You can still work individually if you want. Team members can be from any branch.
2. You have to build a working Android/iOS app for anyone problem before the deadline. You can contact seniors for any discrepancies/doubts in the problem statement.
3. You'll be required to submit an abstract before submitting a solution, in which you will describe the approach to the problem and any external libraries used.
4. The decision of the judges will be final and binding.

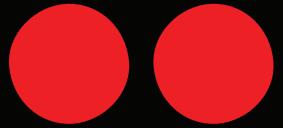


# ... Continued

5. This is a cumulative scores event. So you need to perform well in all rounds to win.
6. You are encouraged to use any platform to build your application. Native as well as Hybrid platforms can be used (PWAs are not allowed).
7. ANY FORM OF CODE PLAGIARISM WILL NOT BE TOLERATED. If any part of the project is found copied the team will be disqualified immediately.
8. For any problems, queries, questions, or help at any stage, contact seniors or reach out to peers.

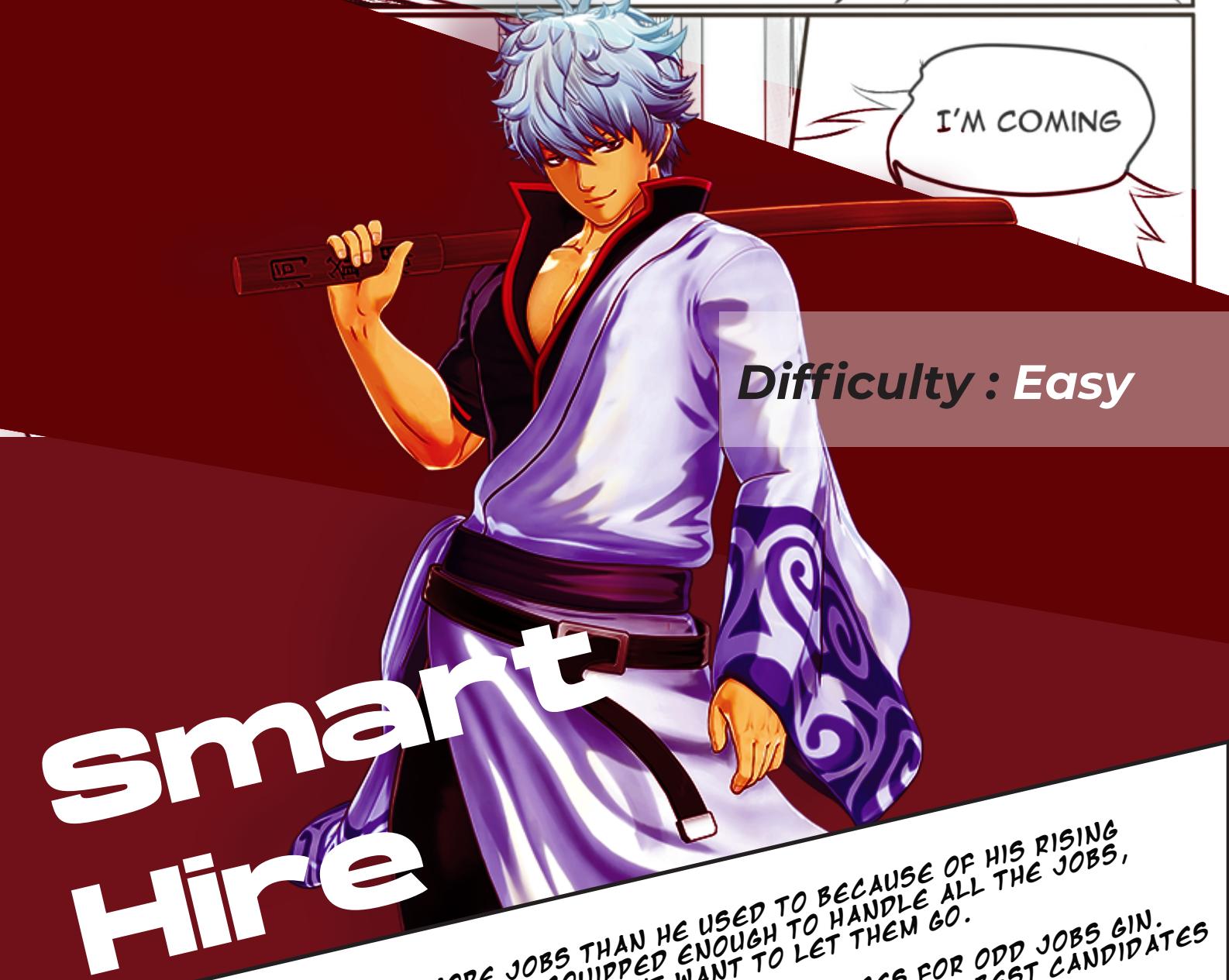


# Some Friendly Tips



1. Focus on making the application user friendly. Backend is important, but so is the User Interface.
2. The main motive of Droidrush 2k22 is to help you to develop an interest in android development and make you equipped with a skill that you can use lifelong to solve real-life problems.
3. The Basic/Advanced features are to guide you on your theme. You are free to add more features from your side which would enhance the quality of the app. You would be judged on your creativity, functionality of your app, User Interface, user-friendliness etc.
4. Participate in team as it will make you a team player and will be helpful in future.
5. Note for first-time developers/beginners: Your focus should be to complete the project in the given time.





**Difficulty : Easy**

# smart Hire

"GINTOKI IS FINDING A LOT MORE JOBS THAN HE USED TO BECAUSE OF HIS RISING POPULARITY. HE IS CURRENTLY NOT EQUIPPED ENOUGH TO HANDLE ALL THE JOBS, BUT AT THE SAME TIME DOESN'T WANT TO LET THEM GO.

GINTOKI WANTS TO RECRUIT INTERNS AND FULL-TIME EMPLOYEES FOR ODD JOBS GIN. HELP GIN-SAN BY DEVELOPING AN APPLICATION WHERE HE CAN FIND THE BEST CANDIDATES SUITED FOR THE JOB."

# **BASIC**

1. Separate login & signup for candidates and recruiters.
2. Recruiters can post jobs, view the profile of applied candidates, update the status of job application, give ratings to applied candidates, send message to applied candidates.
3. Candidates can update their profile, search jobs, apply to jobs, view status of their job applications, read and reply recruiter's message.

# **Advanced**

1. Admin approval for each job posting
- 2.. Admin approval for each job posting.
3. Comment section in job posts.
4. Bookmark job posts for future reference.

**Note:**

- \* Profile must include following fields :
  - a) Personal Details : name, title, picture, address, mobile no., email, resume, profile link for others,dob, website link
  - b) Academic Details : User can add different courses and degrees
  - c) Experiences : User can add different experiences
  - d) Projects : User can add different projects
  - d) Skills, Languages & Others section
- \* Job post must include following fields : title (role), company, location, company logo, eligibility criteria, compensation range, job description link, others.
- \* You can add any other necessary details from your side.



**Difficulty : Easy**

# Ichiraku

SASUKE IS TOO BUSY PRACTICING FOR HIS NEW JUTSU AND WAS UNABLE TO EAT HIS FAVOURITE ICHIRAKU RAMEN AS IT TAKES A LOT OF TIME FOR RAMEN TO GET PREPARED.

YOU HAVE TO CREATE AN APPLICATION FOR ICHIRAKU RAMEN WHERE CUSTOMERS CAN ORDER, CHECK STATUS AND PAY ONLINE!

# **BASIC**

1. Landing page
2. Login signup using the phone number
3. Canteen owner page and students account
4. Dishes availability, Menu and, Rating System

# **Advanced**

1. Payment gateway
2. Feedback, dishes availability, and expected Time based on previous orders
3. Maintain orders and food status notification on order status
4. Introduce a coin system that users will get based on previous orders and can be redeemed later.



*Difficulty : Easy*

# Ha-share-A

TANJIRO IS FED UP OF PAYING FOR INOSUKE AND ZENITSU'S LUNCH EVERYTIME THEY GO OUT ON A DEMON HUNTING TRIP. MAKE A BILL SPLITTING APP TO HELP HIM TRACK HIS EXPENSES AND GET HIS MONEY BACK FROM HIS FRIENDS.

# **BASIC**

1. Basic Authentication
2. Create or join a group with other users
3. Organise Balances
4. Record an expense
5. Split it with other users on the basis of percentage or shares
6. Categorize all the balances
7. Remind about expenses on WhatsApp or email.

# **Advanced**

1. Simplify debt
2. Push notification to all the users when an expense is added containing their share.
3. Payment gateway integration for easy repayment
4. Export the expenses in csv or pdf
5. Charts and graphs to show user's trends
6. Search feature to help locate old bills
7. Option to delete group no longer required
8. Saving expenses as draft for limited time



Difficulty : Medium

# Edward's pet

SHOU TUCKER, ONCE AN INFAMOUS ALCHEMIST, WAS RESPONSIBLE FOR KILLING HIS WIFE BY FUSING HER WITH AN ANIMAL FOR HIS BIO-ALCHEMY RESEARCH. BEFORE HE COULD DO THE SAME TO HIS DAUGHTER NINA AND HER PET DOG ALEXANDER, HE GOT ARRESTED. ALTHOUGH NINA IS ALLOWED TO TAKE HER PET DOG ALEXANDER, SHE GOT ARRESTED. CANNOT DUE TO THE NO-ANIMAL POLICY. ALPHONSE DOES NOT WANT ALEXANDER, HER DOG IN THE STREETS. AS HIS FRIEND, HELP HIM IN FINDING A SAFE HOME FOR ALEXANDER.

# **BASIC**

1. Option to post a pet for adoption with
  - i) Pet Details
  - ii) Owner Details
2. Browse animals : find dogs, cats, puppies etc.
3. Filter results: find a dog/cat by filtering the breed, age, size, gender
4. Review pet details
5. Chat feature to contact with pet owners
6. Information/profile of pet owners

# **Advanced**

1. Map feature to display location of pet
2. Notification to nearby registered people when a pet for adoption is posted
3. Pet details include image/video of pet
4. Create pet shelters and rescues
5. Bookmark pets you like & see them in favorites section
6. Notifications when someone requests to adopt your pet
7. Sorting of pets on the basis of nearby location/ breed/ size
8. Create a community of pet lovers where people can chat/ post their stories
9. Share pet profile with other users
10. A section for lost pets(where pet owner can add pet image & an unique identification of pet) & let people share the location & image of the pet if tracked by someone



HE EVEN  
SMILED!?

# Yuusha Notes



Difficulty : Medium

"MIDORIYA WANTS TO BECOME THE NUMBER 1 SUPERHERO, SO HE'S ALWAYS TAKING NOTES ABOUT THE IMPROVEMENTS HE COULD HAVE DONE BY OBSERVING OTHERS. IT HAS BECOME A HASSLE FOR HIM TO CARRY A NOTEPAD AND PEN ON HERO MISSIONS. CREATE A SOPHISTICATED NOTE-TAKING APPLICATION FOR HIM TO TAKE NOTES ANYTIME AND ANYWHERE HE WANTS."

# **BASIC**

1. Basic authentication.
2. Saving files locally or on server.
3. Setting reminders and receiving notifications.
4. Creating custom labels or tags.
5. Creating sharable links of file.
6. Searching notes using names or labels.

# **Advanced**

1. Drawing.
2. Adding images and video in notes.
3. Sharing files using whatsapp and other applications.
4. Applying various styles on text such as bold, italic, different font sizes ,color and type, background color and more.
5. Collaboration of different users.
6. Exporting to different file format.
7. Adding user's location to notes.
8. Nest notes inside notes, no more messy folders.

# KAGUYA-SAMA: LOVE IS WAR



# **BASIC**

## **Shopkeeper**

- Login/Signup for Shopkeeper
- Shopkeepers should be able to make bills
- Shopkeepers should be able to send bills which should be shown in the bills view of customers.

## **Customer**

- Login/Signup for the customer
- The customer can view all bills sent by shopkeepers, which should be sorted by timestamps.
- The customer should have an option to add the bill to expenses.
- Customers should be able to view their expenses according to various categories like food, shopping, education, etc.
- Customers also should be able to view their expenses between two dates, weekly, monthly and yearly.

# **ADVANCED**

## **Shopkeeper**

- Login/Signup using Google, Facebook, etc.
- The shopkeeper also should be able to manage his inventory. He should be able to add products and the number of items available.
- When the shopkeeper bills the products, the number of items should be subtracted from the inventory.
- Shopkeepers should be notified if a certain item has been depleted to a certain quantity or number.

## **Customer**

- Login/Signup using Google, Facebook, etc.
- Customers should be able to see expense reports in pie charts and graphs.
- Customers should get weekly, and monthly notifications for expense reports.
- Customers should be able to add their expenses manually.



**Difficulty : Medium**

# Askit

"AFTER THE VOLUNTEERS CLUB ROSE TO POPULARITY, STUDENTS STARTED APPROACHING HIKIGAYA, YUKINO AND YUI FOR EVEN TRIVIAL REQUESTS. HIRATSUKA SENSEI OBSERVES THIS, AND BELIEVES THAT THE SKILLS OF THE REQUESTS ARE BECOMING MORE SOPHISTICATED. SO SHE ASKS THE VOLUNTEERS CLUB MUST BE PUT TO USE WITH AN APP WHERE STUDENTS CAN DISCUSS ANYTHING RELATED TO THEIR SCHOOL, ITS EVENTS OR POST QUERIES. THE VOLUNTEERS CLUB OUTSOURCES THE DEVELOPMENT AND HELP EACH OTHER. CREATE AN APP FOR THEM WITH THE FOLLOWING FEATURES:"

# **BASIC**

1. MNNIT Gsuite login
2. Users can have unique usernames
3. Support for text or image posts with caption
4. Upvote/Downvote or Like/Dislike posts
5. Save posts
6. Share posts
7. Comment/Discuss on posts
8. Different communities within  
the app(like subreddits on Reddit)
9. Ability to create and join communities
10. Homepage/Feed based on the joined communities

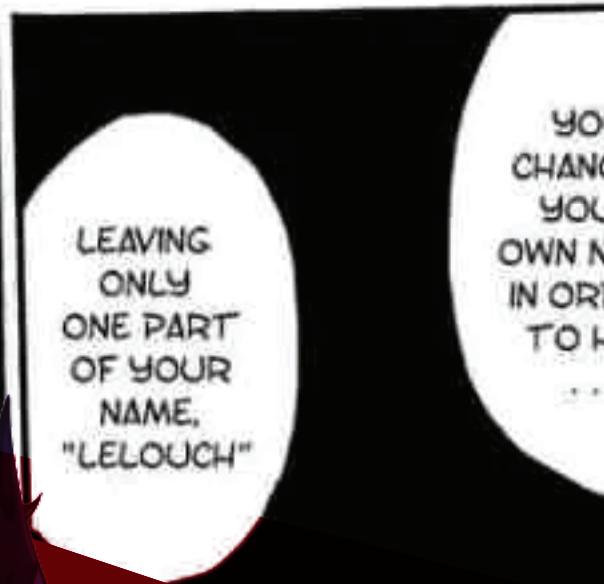
# **Advanced**

1. Option to receive notifications on new posts in  
joined communities
2. Outsiders can only view posts when not logged in
3. Report posts
4. Username moderation to keep the app SFW
5. Community admin(s) can give content moderation rights  
to certain users
6. A feed other than the homepage containing  
recently popular posts
7. Search posts and communities in the entire app
8. Search posts within a community



DO NOT HAVE  
THE RIGHT  
TO SAY  
MY NAME!

ABOUT  
YOU?



LEAVING  
ONLY  
ONE PART  
OF YOUR  
NAME,  
"LELOUCH"

YOU  
CHANGE  
YOUR  
OWN NA  
IN ORD  
TO HI

# shatranj



"LELOUCH IS A MASTER OF CHESS IN HIS COLLEGE. HE WANTS TO PLAY CHESS WITH HIS FRIENDS, HOWEVER, BECAUSE OF IMPROMPTU PLANS, HE DOESN'T ALWAYS HAVE A CHESS BOARD WITH HIM.  
HELP HIM DESIGN A CHESS ANDROID APPLICATION SO THAT HE CAN PLAY CHESS WITH HIS FRIENDS WHENEVER HE WANTS."

**Difficulty : Medium**

# **BASIC**

1. Basic authentication (Google Signin or Mobile OTP)
2. Player profile & leaderboard
4. Start new game
3. Share link with your friend to join game
5. Connect to game on clicking the invite link
6. Timer for each turn and in case no move is made within time, game is drawn
7. Show available moves on selecting chess pieces
8. Announce the state of game (won/lost/draw) automatically
9. Sound effects

# **Advanced**

1. Search players and make friends
2. Show online players and option to start new game with them
3. Players can switch between multiple themes
4. Download data as pdf files such as leaderboard, profile of player etc
5. Share result of a game(player info, winner/loser) through other apps
6. Create/edit tournaments
7. Email reminder for tournaments



# Horikita Hall

HORIKITA IS LOOKING FOR AN OPPORTUNITY TO GO TO SECTION A. LUCKILY, THE ELITE SCHOOL WANTS TO UPGRADE THEIR INFORMATION SYSTEM, SO THEY GAVE THIS AS A TASK TO ALL SECTIONS A, B, C, AND D, WHICH IS OF VERY HIGH POINTS. AYANOKOJI IS SMART, BUT HE IS NOT INTERESTED, SO SHE HAS COME TO YOU FOR HELP. NOW SHOW YOUR SMARTNESS AND DEVELOP AN APP WITH THE FOLLOWING FEATURES SO THAT HER CLASS CAN WIN THIS EVENT.

**Difficulty : Hard**

# **BASIC**

1. User should be able to add/delete/join new clubs
2. Home pages for clubs
3. Club admins can request for booking auditoriums/halls for any events
4. Can post details of events which shall be notified to all the members of club
5. Post should contain event poster, a short video along with brief introduction
6. Members can book their seat for any event(paid/unpaid)
7. A calendar for users to see all the events they have attended

# **Advanced**

1. Club admins can attach profiles of event coordinators, hosts, and guests.
2. If in case auditoriums are not available, admins are allowed to hold events virtually via video conferencing(by sharing secret code)
3. Make a club private (in which admin can approve the join requests)
4. Users can set reminder for upcoming events
5. Event wise discussion forum
6. Notify club admins when auditorium is available.



# Devil A scrap dealer

MAOU SADAO, HANZO AND ASHI CHIYA LIVE IN A SMALL APARTMENT. HANZO DO LOTS OF ONLINE SHOPPING, AND AS A RESULT, LOTS OF SCRAPS HAVE ACCUMULATED. ASHI CHIYA ASKED HANZO TO SELL ALL THE SCRAP, HANZO BEING LAZY, DOESN'T WANT TO GO OUT LOOKING FOR A SCRAP BUYER. SO HE SEARCHES FOR AN APP, AND NOW HE CAN CHILL AND DO ONLINE SURFING. HE FOUND AN APP, AND NOW HE CAN CHILL AND DO ONLINE SURFING. YOU HAVE TO CREATE A SIMILAR ONE SO THAT YOUR LAZY FRIENDS CAN ALSO CHILL.

# BASIC

## Customer

1. Login/Register for customers
2. Customers can request the scrap dealer to buy scrap and should be able to set the date and time at which they want to sell the scrap.
3. Can give feedback and rating to the scrap dealer after selling scrap.

## Scrap dealer

1. Login with userId and password provided by the organization Admin.
2. Should be able to accept the customer's request.
3. After buying the scrap, he should be able to make a bill for what item he bought and their quantities and final amount. After that, the request opened should be closed and will go into history for both customer and scrap dealer.

## Admin

1. Admin should be able to set the buying price for each item, and it should be visible to both (the customers and scrap dealer)
2. Should be able to register the scrap dealers and provide userId and passwords to them.

# **ADVANCED**

## **Customer**

1. Google/Facebook sign-in/sign-up
2. Can share the app with his friends.
3. Can cancel the scrap dealer visit request.
4. Customers should be able to set multiple dates and time duration at the time of the request.

## **Scrap dealer**

1. Can set his interest, like in which locations he is operating.
2. Can set his status (whether he is taking requests or not).  
If the status is offline, the request should not go to that dealer.
3. Each request should be first sent to those who are nearer to the customer's location. If, after 1 minute, no one accepts, it should be sent to those who have shown interest in that location.

## **Admin**

1. Can see how much a scrap dealer bought in a day and their feedback and all requests.
2. Can analyse which item bought how much by daily, weekly, monthly, and annually.
3. Should be able to send push notifications to customers and scrap dealers.

THE LAST  
GENERATION  
OF THE SEVEN  
SWORDSMEN  
OF THE HIDDEN  
MIST!



# Naruto Run

*Difficulty : Hard*

NARUTO WAS ON HIS WAY BACK TO SAVE THE VILLAGE FROM AKATSUKI BUT  
DURING REVERSESUMMONING HE WAS STUCK IN A DIFFERENT WORLD  
WHOSE EXIT IS FILLED UP WITH OBSTACLES.  
HELP NARUTO ESCAPE IT.

# **BASIC**

An obstacle based game; refer to casual games toolkit.

There will be obstacles; on tap, the character must jump/duck

1. Game arena with obstacles
2. Score system
3. Login/sign up
4. Leaderboard
5. Lives

# **Advanced**

1. Multiplayer game
2. Different arenas to choose from
3. Site map
4. Difficulty levels
5. Different characters to choose from



# open Theme

APPLICATION INTEGRATED WITH ML/AI TO  
HELP BLIND PEOPLE/AGRICULTURE SECTOR.



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