SVKM'S NMIMS Deemed-to-be UNIVERSITY

MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING

# Mobile Application Development

*Project Report*

PLACEMENT DOOR

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A039 - Ashika Kotia

**Overview:**
Placement door is a one stop destination for all campus placement needs. We have provided all kinds of resources for placement training, like various videos where one can train for different types of placement exams. Various articles to educate yourself about the market/situation of placements all over India. We have placement prediction test which is a Machine learning model where one can enter academic details(HSC marks,SSC Marks, CGPA,Placement exams marks) Based on this data our model will predict if one can get placement or if you have to work more/learn more about placement exams so that you can get placed.

**Description**
**Learned Tools & Components :**

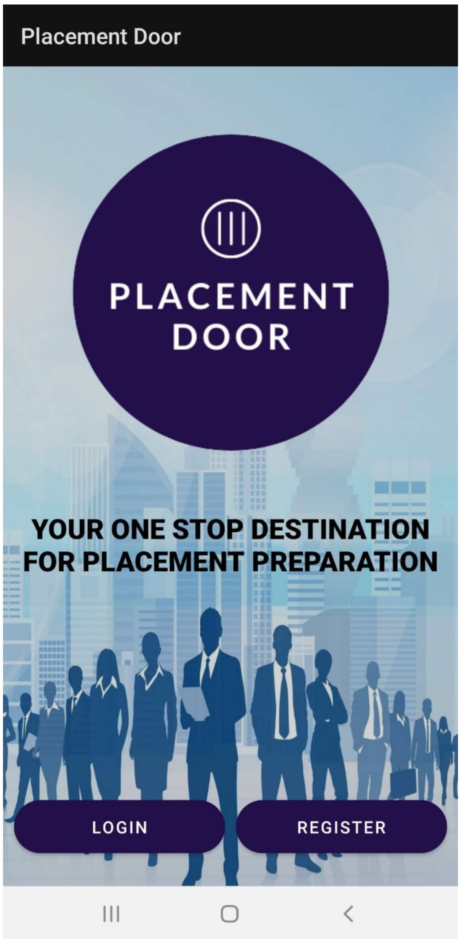
1. Firebase Authentication for Login & SignUp : Firebase is a Backend-as-a-Service (Baas). It provides developers with a variety of tools and services to help them develop quality apps, grow their user base, and earn profit. It is built on Google's infrastructure. Firebase is categorized as a NoSQL database program, which stores data in JSON-like documents. In the placementdoor app we used the firebase db to perform login and registration of the user, on entering the username and password, it is sent to the db and validated.
2. Linear Layout: LinearLayout is a view group that aligns all children in a single
3. direction, vertically or horizontally. You can specify the layout direction with the
4. android: orientation attribute.
5. Spinner: A view that displays one child at a time and lets the user pick among them. The items in the Spinner come from the Adapter associated with this view.
6. ListView: Displays a vertically-scrollable collection of views, where each view is positioned immediately below the previous view in the list.
7. TextView(Used to Display Text),Button(Used to perform an action),EditText(Used to take input from user), ImageView(Used to Display Image)
8. Event Listeners
   - Action_DIAL(Open the user phone page with the number in the section,where user can simply click on the button and a call will be made to said person)
   - OnCreate :Specifies the action that needs to be performed when an item is created
   - OnItemClick : Specifies the action that needs to be performed when an item is clicked

**Self Learnt Tools & Components:**

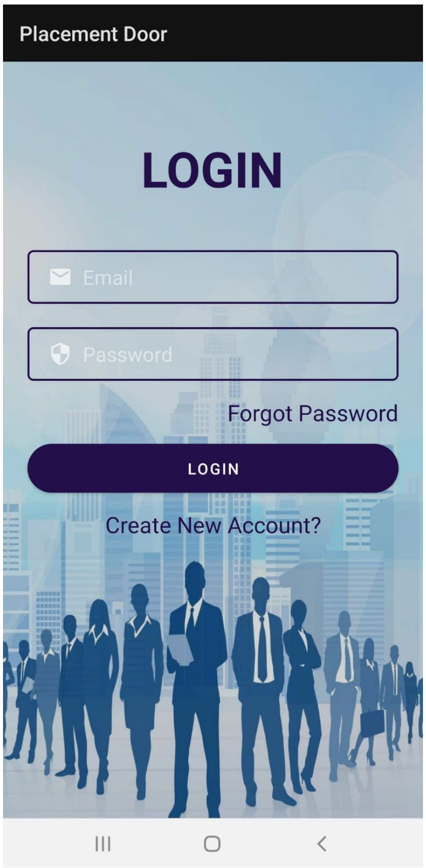
1. Scroll View: A view group that enables scrolling of the view hierarchy included inside it. Only one direct child may be inserted within a scroll view. To add several views within the scroll view, add a view group, such as LinearLayout, as a direct child and insert more views within that LinearLayout.
2. Canva & Figma(UI Design): Learned how to utilise Figma for UI design using templates and UI concepts, colour schemes, and so on. Canva was used to create the logo.
3. Git & GitHub basics(VCS): Version Control Systems were utilised to maintain code among teams; when one person published their modifications into the code, the other members may remotely apply those changes to their code, which improved our productivity.
4. Password Validation: User passwords were validated to see if they were of min length 6
5. Password Reset: Utilized a firebase feature to send user an email to reset password on click of forgot password
6. RecyclerView: Very similar to a listview,however it offers more flexibility for providing a limiting window into a large dataset
7. Flask API creation: Learnt how to convert a simple Machine Learning Model into an API using the Flask Microframework
8. Deployment on Heroku: the Flask API that we created was then deployed using the heroku documentation and basic git commands
9. Testing using Postman: The API deployed on Heroku was tested for conditions like 200ok, whether data was in json format etc
10. YouTube API integration: The YouTube DataAPIv3 was integrated with the project using the Google Dev Console guide and YouTube Videos; the videos are shown using the user's API Key and Video ID.

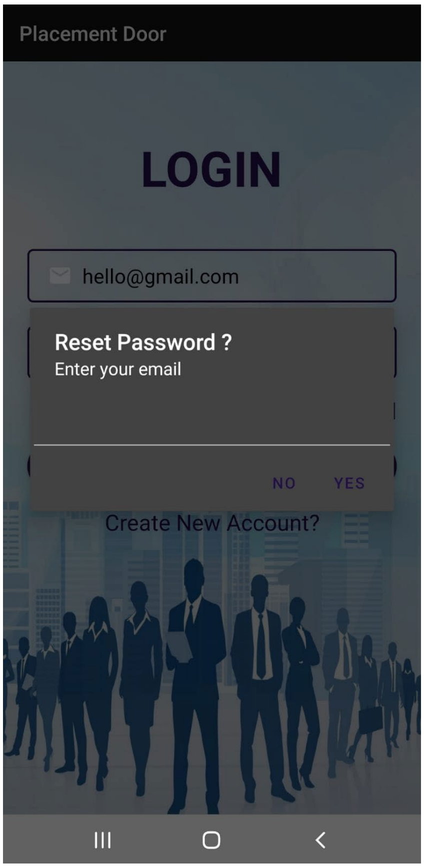
**User Manual (Step-by-Step screenshot and brief about the working of app).**

- Login and Signup was implemented using Firebase database. Authentication is set for email and password. The email must be in standard email format and password must have length of minimum 6 characters. Error messages are displayed if there is any mistake in filling the login/registration form. The forgot password function sends a link to the entered email ID for resetting the password.
- After signing in the app, the user has a variety of choices to choose from
    1. Prediction model
       This is a machine learning model which, on the basis of factors like ssc percentage , hsc percentage, stream, entrance test marks etc predicts whether the user can relax and need not worry about their placement or whether they need to work harder in order to get hired by a good company. This model was programmed in python and deployed on heroku after which it was connected to the java app in android studio.
    2. Video Tutorials
       This page consists of youtube playlists consisting video lectures for placement preparation. It uses the youtube data API V3 along with the user API  Key and the playlist ID and returns the youtube video title, thumbnail and URL. This is then embedded into the List View which is presented to the user.
    3. Placement Resources
       This page consists of various placement resources for example latest news and updates regarding the job market. The resources are in a list view with urls to the resources.
    4. Speak to a counsellor
       This button leads to the phone dialler on the phone to call a counsellor for advice/guidance which they often need.



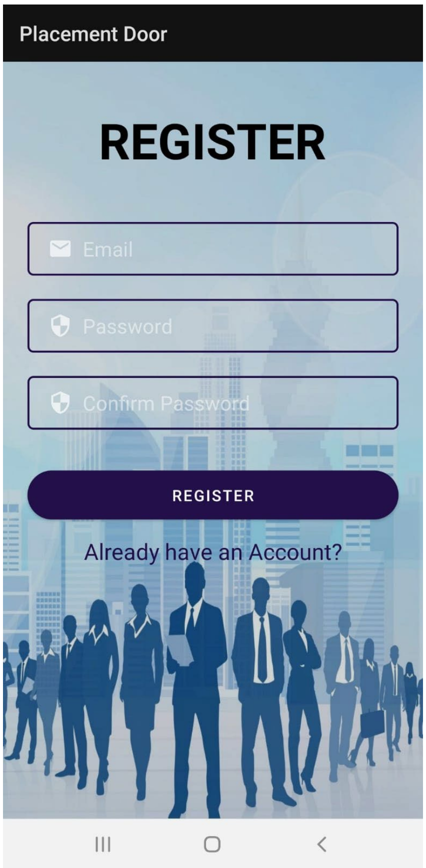
YOUR ONE STOP DESTINATION FOR PLACEMENT PREPARATION

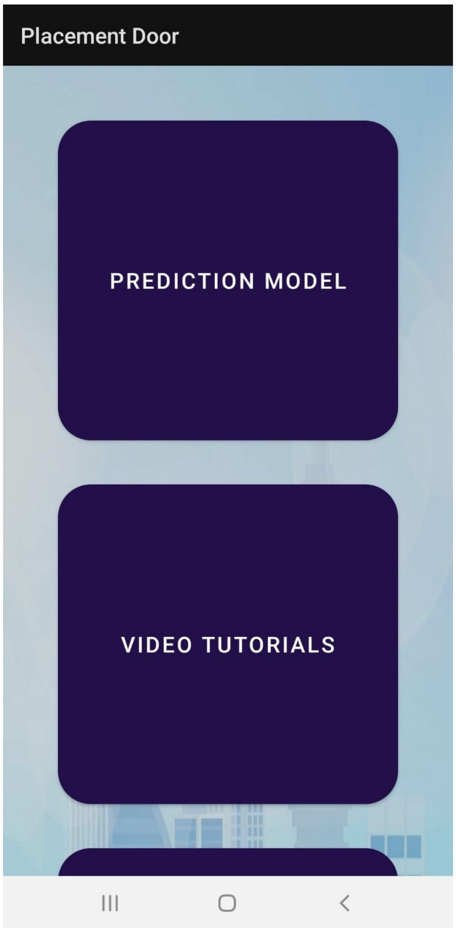


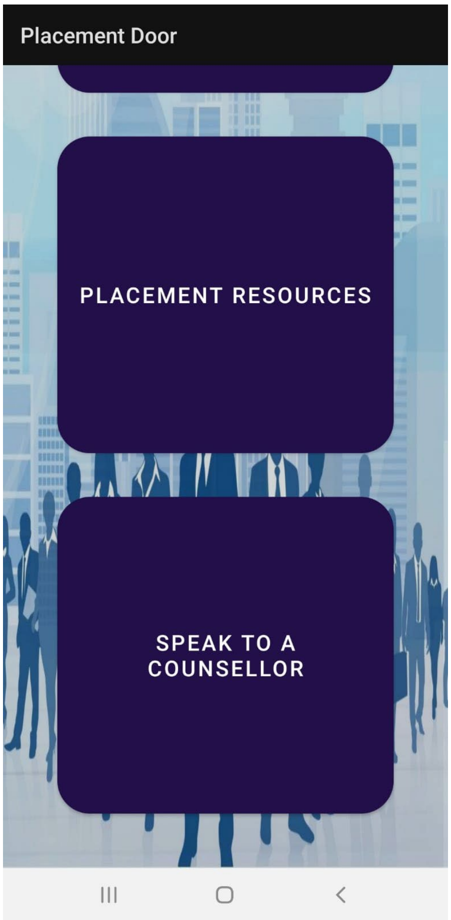


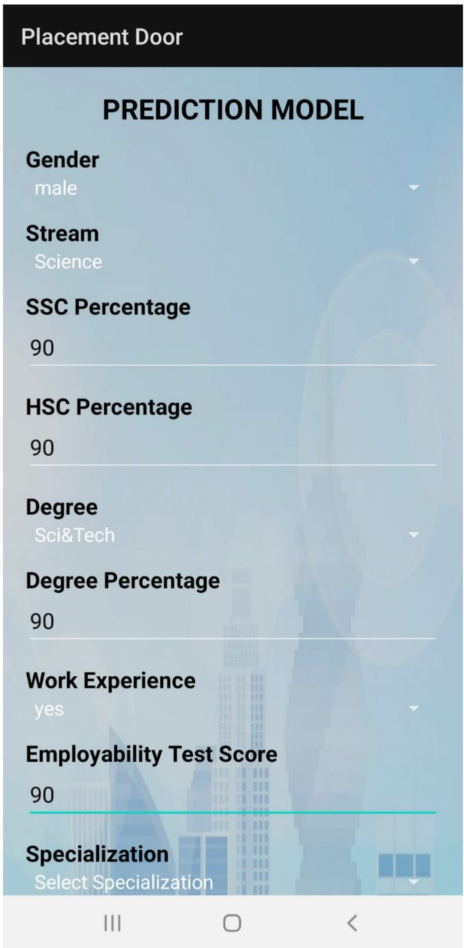
hello@gmail.com

Reset Password ?
Enter your email









PREDICTION MODEL

Gender
male

Stream
Science

SSC Percentage
90

HSC Percentage
90

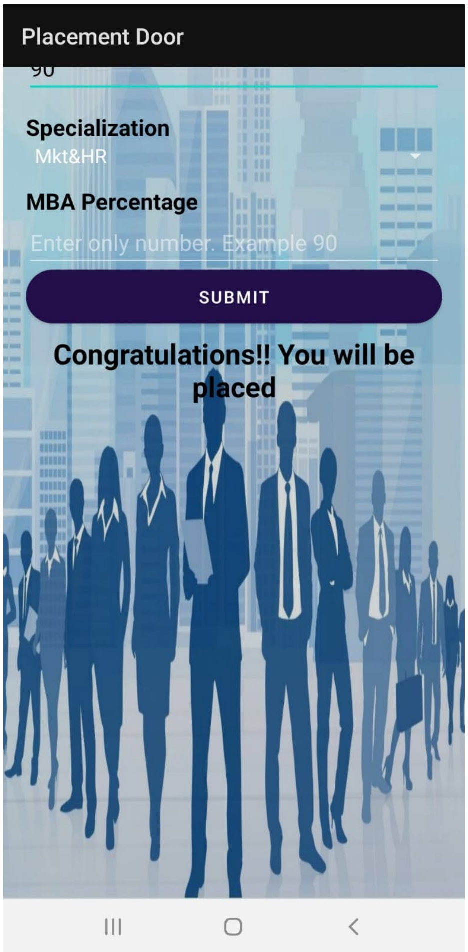
Degree
Sci&Tech

Degree Percentage
90

Work Experience
yes

Employability Test Score
90

Specialization
Select Specialization

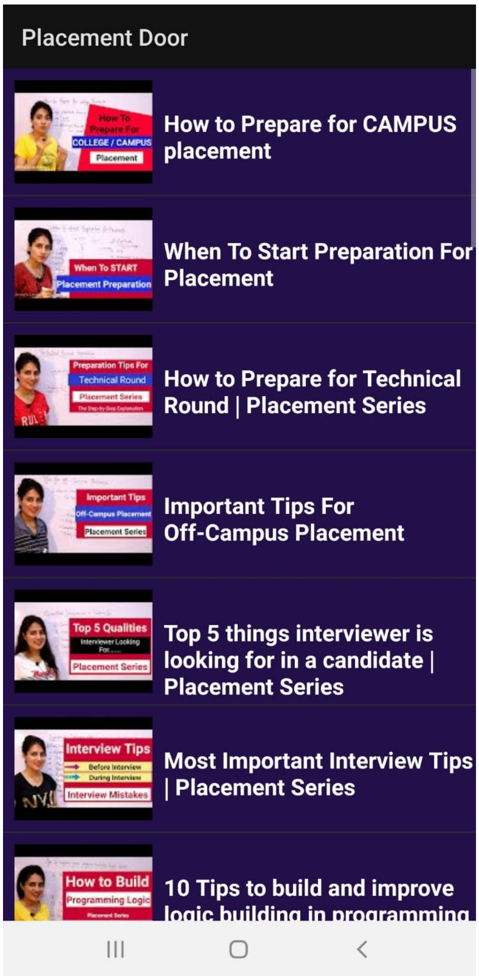


90

Specialization
Mkt&HR

MBA Percentage
Enter only number. Example 90

Congratulations!! You will be placed



Placement Door

How to Prepare for CAMPUS placement

When To Start Preparation For Placement

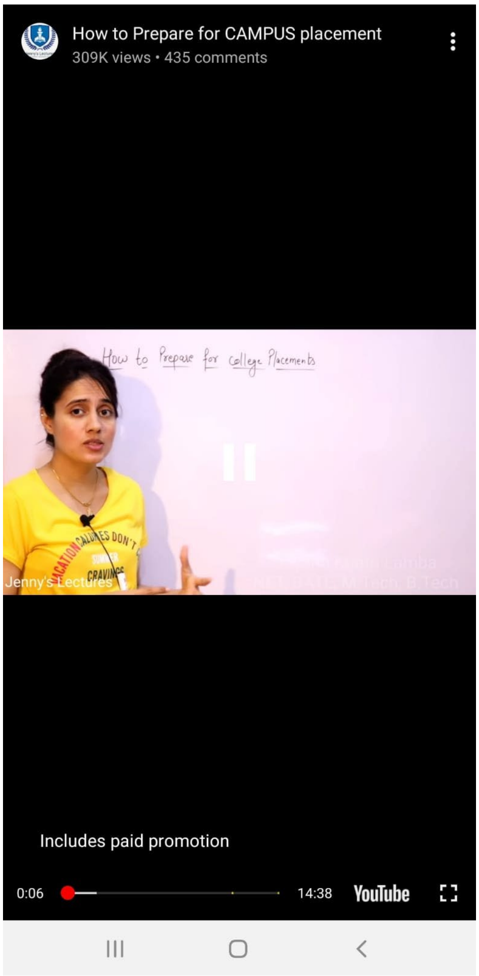
How to Prepare for Technical Round | Placement Series

Important Tips For Off-Campus Placement

Top 5 things interviewer is looking for in a candidate | Placement Series

Most Important Interview Tips | Placement Series

10 Tips to build and improve logic building in programming

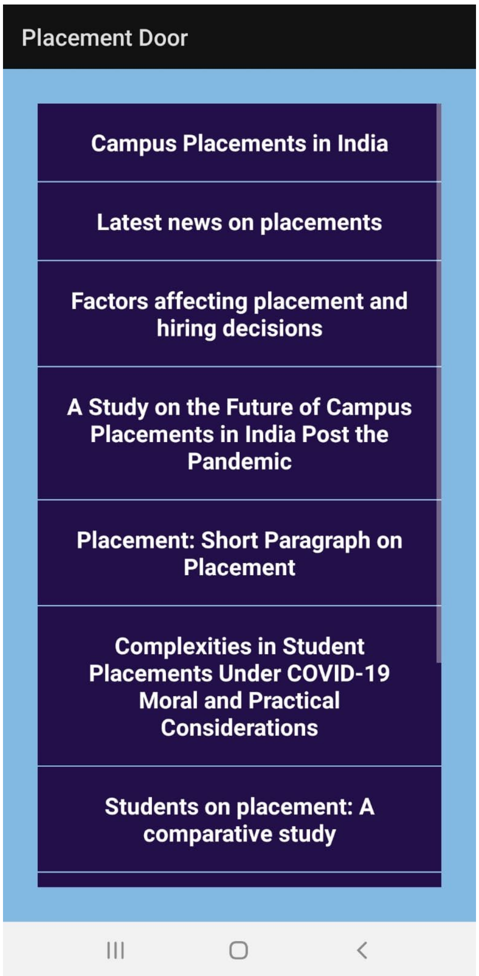


How to Prepare for CAMPUS placement

309K views • 435 comments

Includes paid promotion

0:06 14:38 YouTube



Placement Door

Campus Placements in India

Latest news on placements

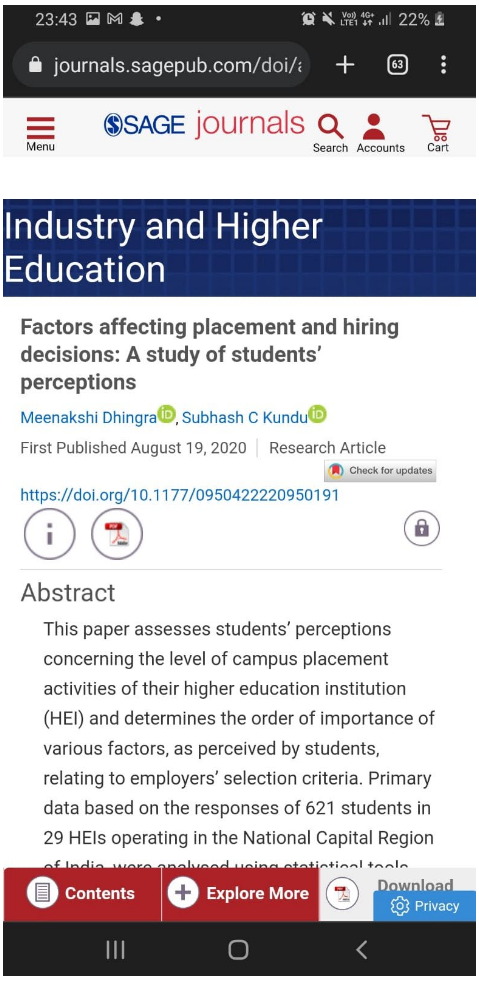
Factors affecting placement and hiring decisions

A Study on the Future of Campus Placements in India Post the Pandemic

Placement: Short Paragraph on Placement

Complexities in Student Placements Under COVID-19 Moral and Practical Considerations

Students on placement: A comparative study



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Factors affecting placement and hiring decisions: A study of students' perceptions

Meenakshi Dhingra, Subhash C Kundu

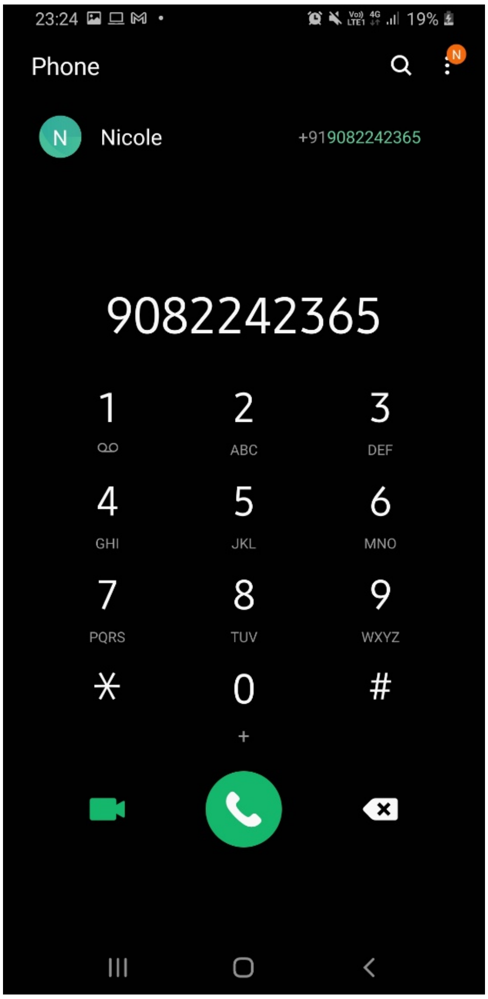
First Published August 19, 2020 | Research Article

Check for updates

https://doi.org/10.1177/0950422220950191

Abstract

This paper assesses students' perceptions concerning the level of campus placement activities of their higher education institution (HEI) and determines the order of importance of various factors, as perceived by students, relating to employers' selection criteria. Primary data based on the responses of 621 students in 29 HEIs operating in the National Capital Region of India were analysed using statistical tools



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**Reference Material design topics:**

Linear Layout: https://material.io/develop/android/components/cards

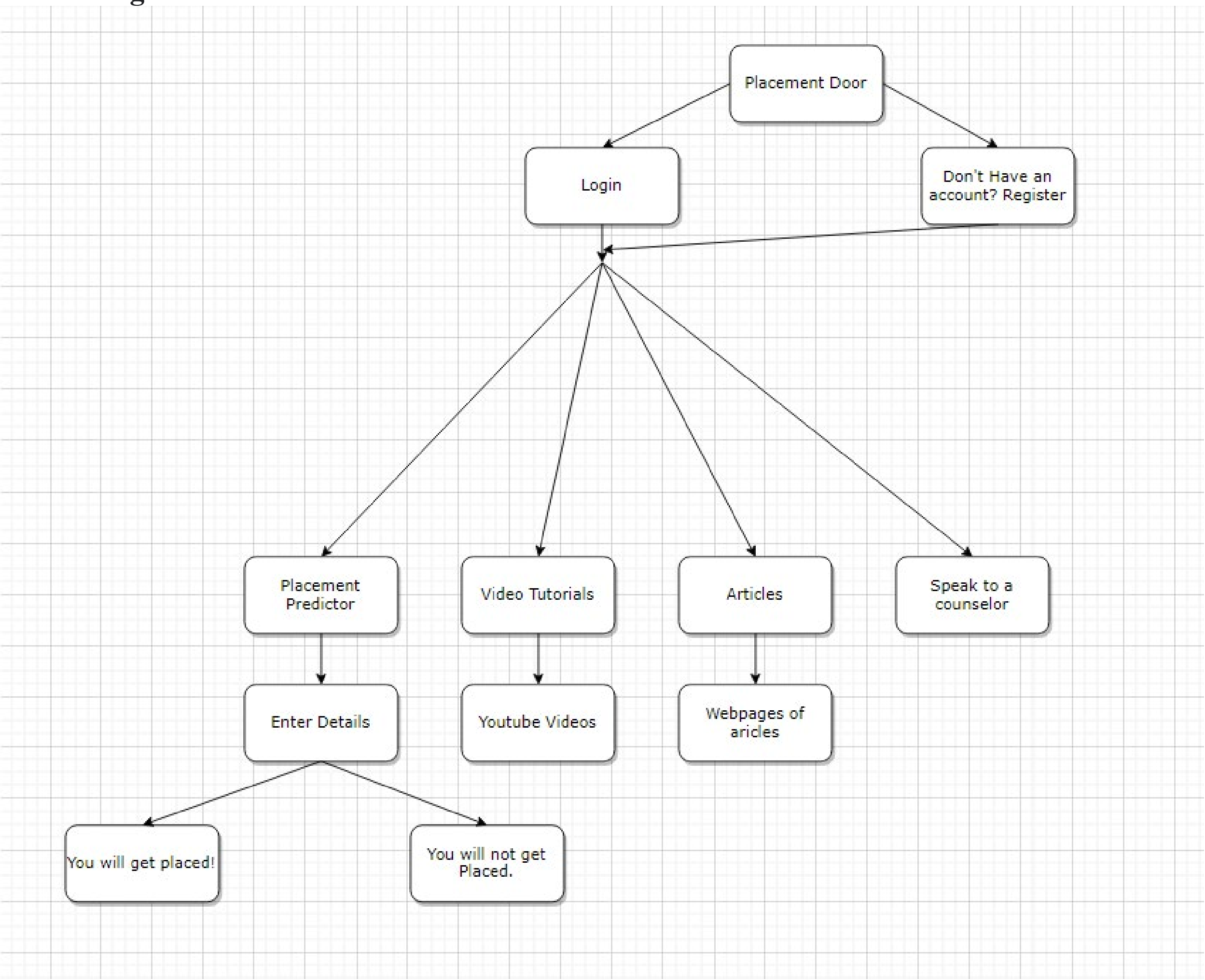
TextView: https://material.io/develop/android/supporting/text-view

Event Listeners: https://material.io/components/sliders/android

List view:https://material.io/components/lists

**Modules:**

**Block Diagram:**



**Distribution of Work**

Nicole D'Souza : Model BackEnd, Youtube API integration
Shruti Jain : Entire UI of App, User Database for Login-SignUp, Frontend for ML Model
Ashika Kotia : Articles using Listview, Documentation
Joint : Integration of Modules

**Things tackled/learned in the team:**

- Flash API was not working, it was not deploying.
- List view was not working.
- We learned about many constraints-like we got to know that string-array has a limitation for items.
- We learned debugging, formatting errors.
- How to read logs and understand how to deal with different types of errors