



# RAJANY

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May 21, 2017

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## ABSTRACT

This report and application aim to develop a web and mobile application which is about architecture, interior design and decorating, landscape design and home improvement. It is aimed to the people in the age range 6-50 who find it difficult to design their houses and decorate it. As one of my family members is an interior architect, i started to develop the idea of responsive application for his company that can help his clients and even others.

Rajany has many features that makes it unique; the chat room and the blog part of it makes it so interactive and interesting especially when it comes to getting inspired by other people's designs and trends.

A very important aspect of the application will be the interface design, which has to be designed with its target user in mind and this affects all aspects of the application development. I hope to use concepts that I have learnt through the Android Development And Networking Course (BAU Course) and other self tutored courses in iOS and Web, to develop an application that is tailored to users with home decor needs, however, due to time constraints this was substituted for a single hands-on test session at a specialist school with potential target users.

## PREFACE

This report is submitted as part of the requirement for the degree of Bachelor of Science (BSc) in Computer Science at Beirut Arab University. The work in this report is a product of my own labour. This report may be copied and distributed, provided the source is acknowledged.

Amr Farouk 21 May 2017

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## ACKNOWLEDGMENT

I would like to thank my project supervisor, Abdala El Chakik for the guidance and the many discussion sessions which gave me the enthusiasm to compose the report as well as design and build this application.

Thanks to everyone who participated in the testing of the application, particularly the students and staff of Beirut Arab University and especially Abdala El Chakik who helped make the research sessions possible at the university.

Additionally, I would like to thank my partner, Khaled, whose feedback and opinions helped throughout the development and design of this project.





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## SUMMARY

This report, along with the associated client application and server-side scripts developed has combined several Home Decor techniques to create a unique new application for Android, iOS and Web aimed at architects and designers to help get inspired. This report details the project from conception to end-result, including the requirements analysis, design considerations that were made to support the target user, the development of the client application, issues faced during development, testing performed and the evaluation of the application with the end- users themselves, in the school environment for which Spectrum was developed.

The extensive testing of the application components, as well as manually testing the application on different devices ensured that they performed to the specification.

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# INTRODUCTION

Rajany is a mobile application that helps customers design and get inspired with nowadays Interior Design trends.

The most frustrating thing about designing your apartment, or house, is that you cannot find the perfect style match that fits your desires.

With Rajany you can browse a big library of interior design photos and much more.

What makes Rajany different is the chat rooms with several topics of home décor and interior design ideas.

Additionally there are blog section in Rajany application which is good for getting inspired by other architects and designers.

In Rajany application you can save and share all the designs you liked with on touch.

And as long as you are done with your selections you can contact Rajany designers to start the the design that meets your requirements.

With a short period of time your project will be done and ready for implementation.

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## PROJECT GOALS

Decorating and designing your home can be frustrating specially when you are doing it from scratch. With Rajany all your fears will be gone. As the company delivers high quality designs by just using its app and web services. Nowadays interior designers have to sit with their clients for hours to choose the right design, but with Rajany all what you need will be adjusted the right way.

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# PROBLEM STATEMENT

The most important problems encountered during Interior/Exterior Design are:

- Customer Time  
Many customers are searching for the fast and easy way to finish their desired project.
- Designer Time  
Designers run out of time for several projects design at once.
- Communication  
Communication between the customer and the designer is a must so that the final project meets the requirements demanded.
- Miscommunication  
Some misunderstandings occur while the project meeting and design interview.
- Selection of Ideas  
Choosing the right ideas from magazines and catalogues wastes time and might not match the customer style.
- Negotiation  
Negotiation of the design criteria doesn't always satisfy the customer.
- Customer Satisfaction  
Quality of the project in development isn't always the same as demanded at the beginning of the design.



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## SOLUTION

Through our application and the big library, we will solve the problems faced while interior/exterior design.

- Security is a most in all nowadays applications that's why all data registered with Rajany will be encrypted before storage.
- Social media is the today trend that's why you can connect Rajany with your favorite social media websites.
- Keeping all your favorite ideas, photos and colors in one place wherever you go.
- Browsing the newsfeed of Rajany is a fun experience while you can save and share whatever you like.
- And definitely managing all your saved records and favorites with on touch, additionally you can post advices and post/share your successful stories with Rajany users.
- The chatroom makes it easier for Rajany user to communicate with each other and with their architects implementing their projects.

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# OBJECTIVES

The aim of this application is to develop a mobile-based and web-based interface for online Interior/Exterior design in order to:

1. Designing and decorating online.
2. Reduce waste time while designing Interior/Exterior design subjects.
3. Ease and expedite communications.
4. Huge library helps clients select what meets their desires.
5. Facilitating the negotiation between the designer and the client.
6. To get a good feedback and high rating of the company.

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# FUNCTIONAL REQUIREMENTS

The system is planned to provide the following:

- A. Login with secure system (Firebase Database Encrypted Password).
- B. Login with Facebook and Google plus and Normal Login/Register.
- C. Keeping record of interior/exterior design photos (Ideas).
- D. Keeping records of favorite color schemes, hints and picks.
- E. Browse, save and share subjects from “home”, ”colors” news feeds.
- F. Manage your photos (Ideabook), (ColorSchemeBook), (ColorHintsBook), (ColorPicksBook)... Share or Delete Items.
- G. Chatroom for inspiration and communication.
- H. Blogs (Advice And Stories Section), commenting advices and stories and even posting a new advice or a story.

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# NON FUNCTIONAL REQUIREMENTS

- A. Security-Secure access of data
- B. Reliability
- C. Maintainability
- D. Portability
- E. Extensibility
- F. Reusability

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# SOFTWARES & LANGUAGES

**In the development of this mobile and web application we will be using the following resources:**

1. Interior/ Exterior design photos (Ideas).
2. Jotun Color Schemes
3. Interior/ Exterior Design Useful Advices & Successful Stories.

**In our work on this application, we will develop through several tools as follows:**

1. Android Studio 2.2 (JAVA) used for the main development and implementation of Rajany for Android.
2. Xcode 8.3 Used for the main development and implementation of Rajany for iOS.
3. IntelliJ PHPStorm (PHP, JAVASCRIPT, HTML, CSS) Used for the development of server side application files and the website.
4. Hostgator (Domain And Hosting), website domain: amrfarouqa.website
5. Mamp Pro (Local Server) Used for testing server side application files.

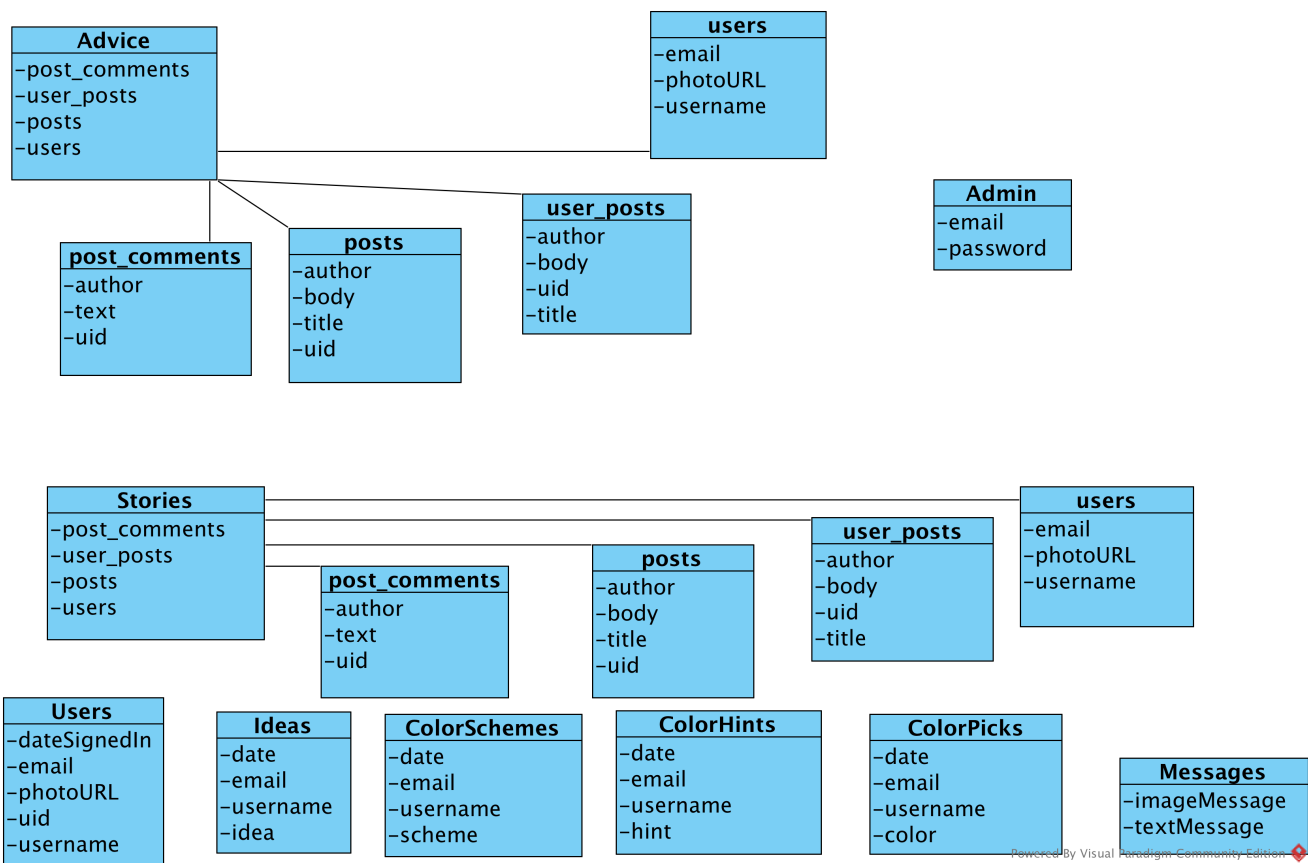
**In the development of this mobile and web application we will be using the following database technology:**

**Firestore Database And Cloud Service by Google**

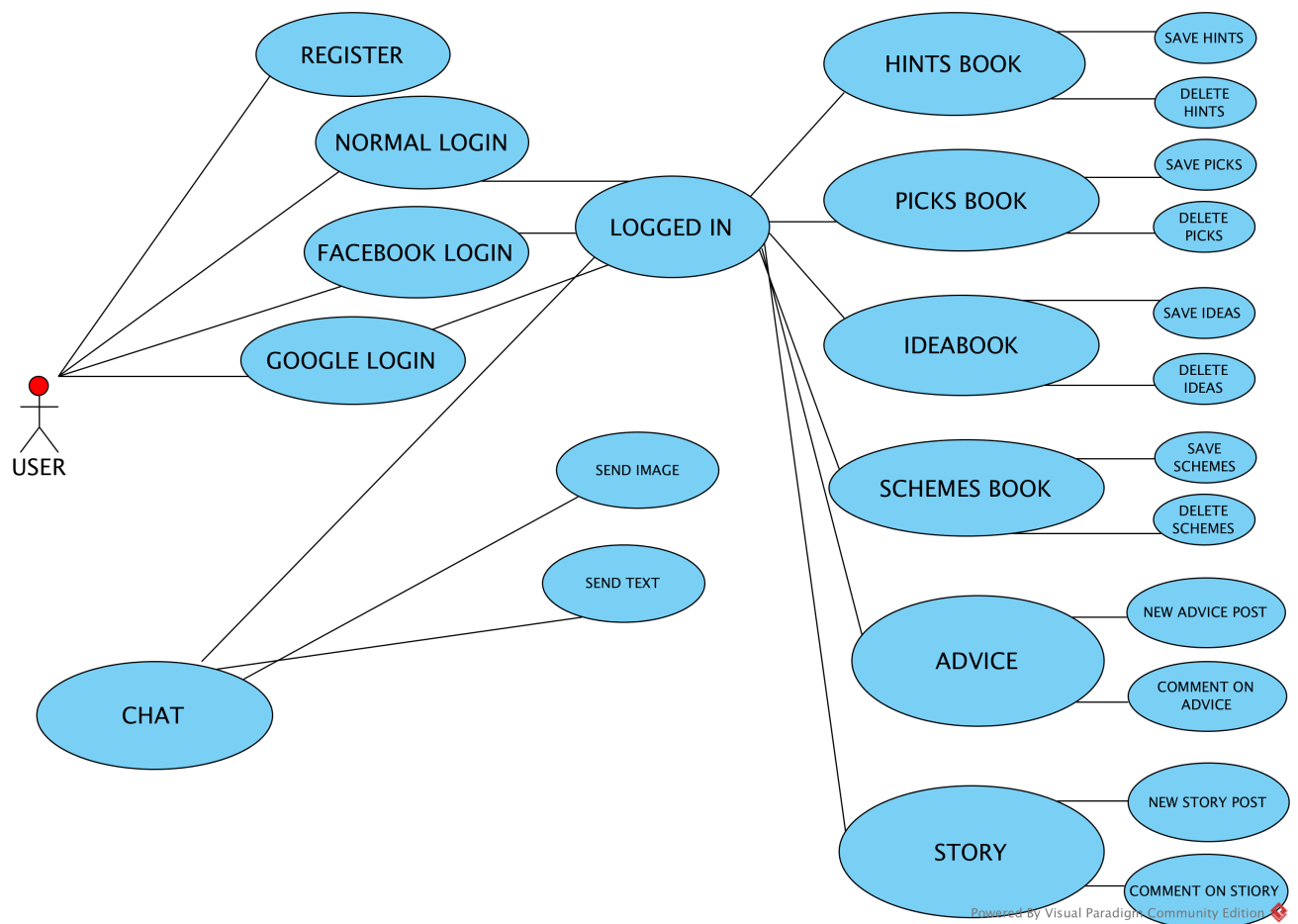
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# DIAGRAMS

- Rajany Firebase Database Diagram



- Rajany Use Case Diagram



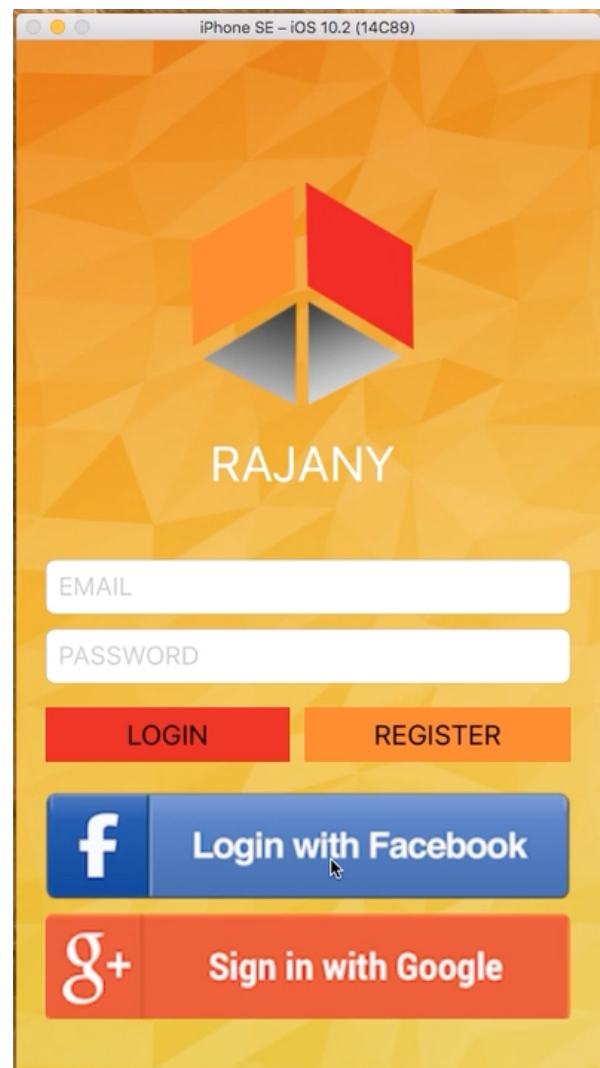
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# FRONT-END ARCHITECTURE

## IOS INTRO IOS



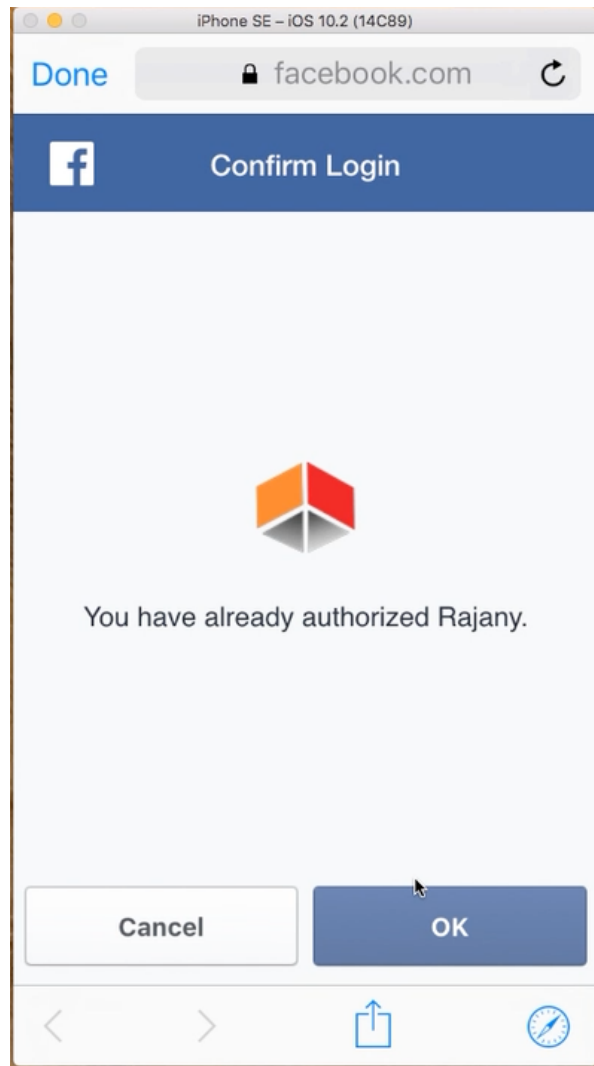
Intro Slider



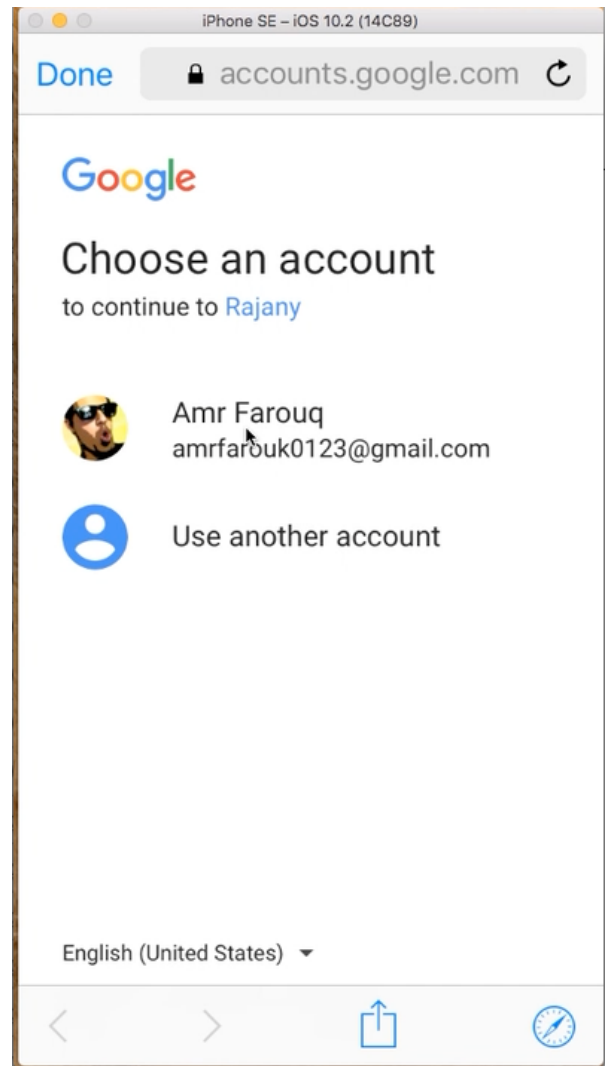
Main Login Screen



## SIGN IN METHODS IOS

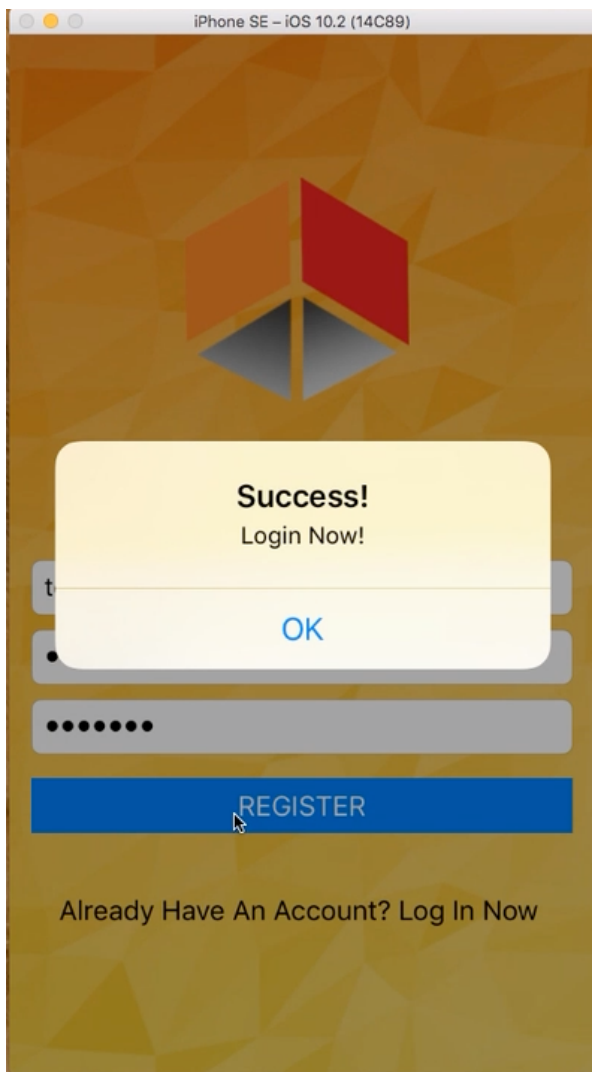


Facebook Login

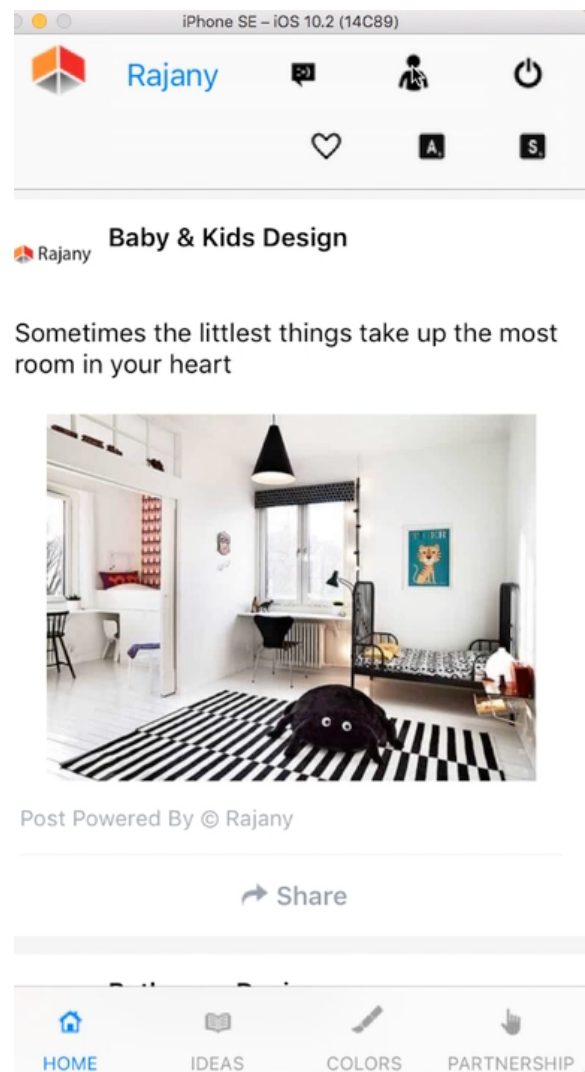


Google Login

## REGISTRATION AND HOME TAB IOS



Registration

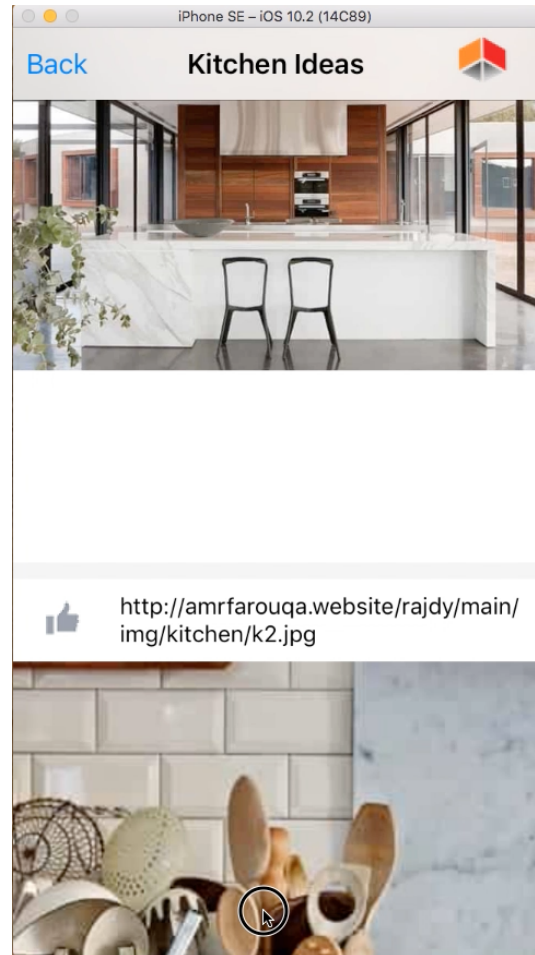


Home Tab

## IDEAS AND IDEABOOK IOS

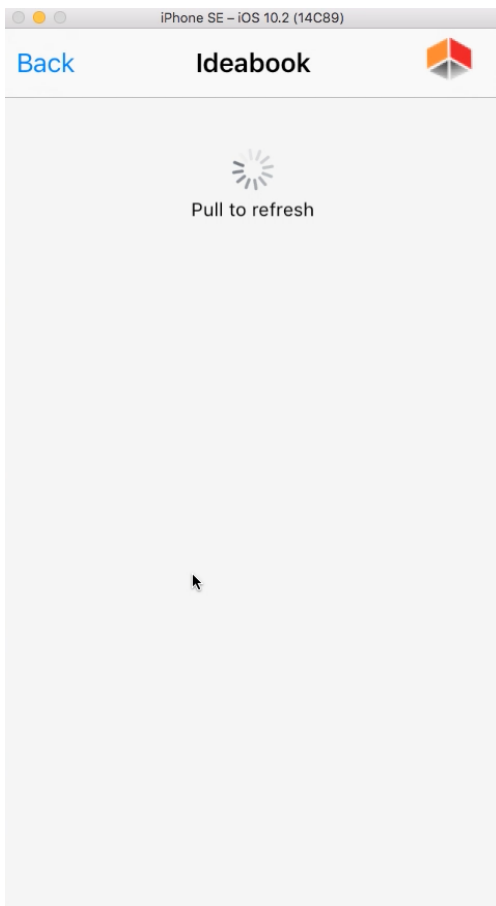


IDEAS TAB

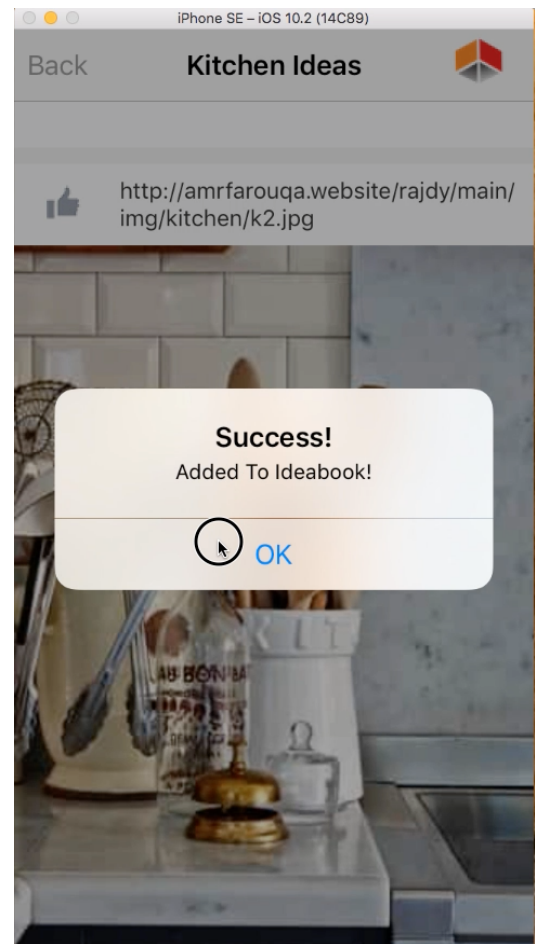


Kitchen Ideas

## IDEAS AND IDEABOOK IOS



Empty Ideabook



Saving To Ideabook

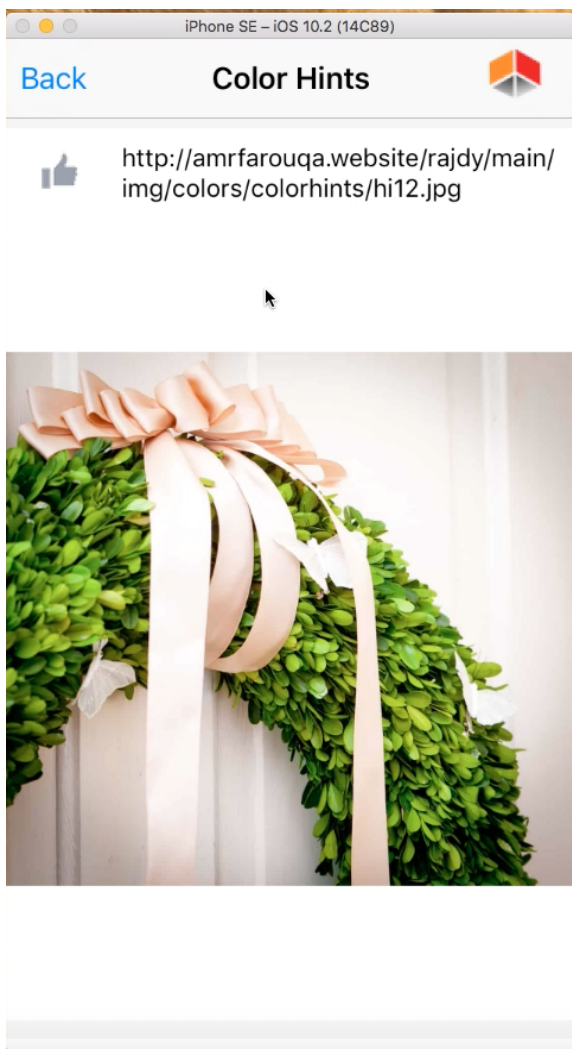
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## IDEAS AND IDEABOOK IOS

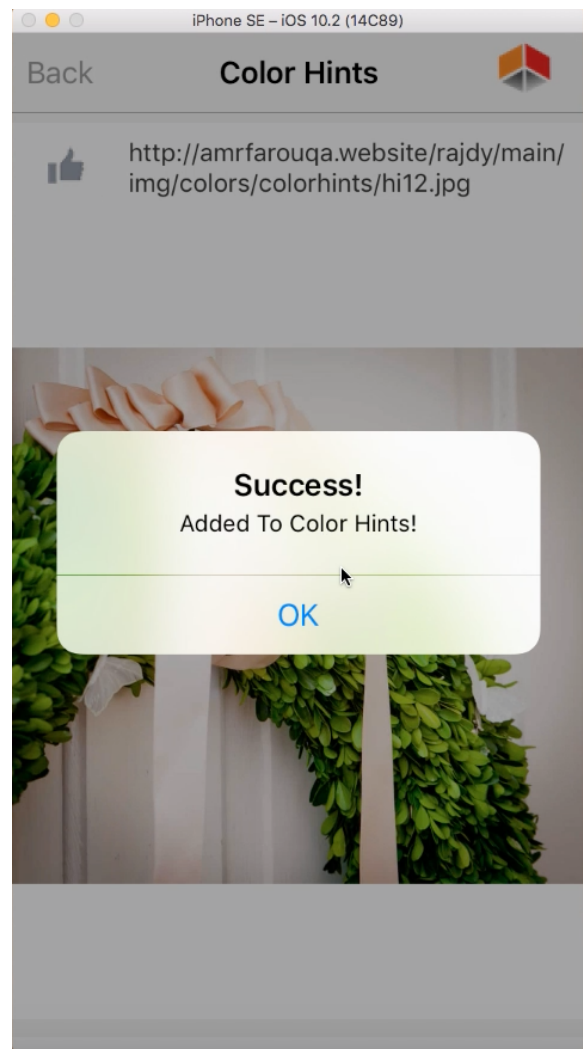


Saved IDEA

## COLOR HINTS IOS

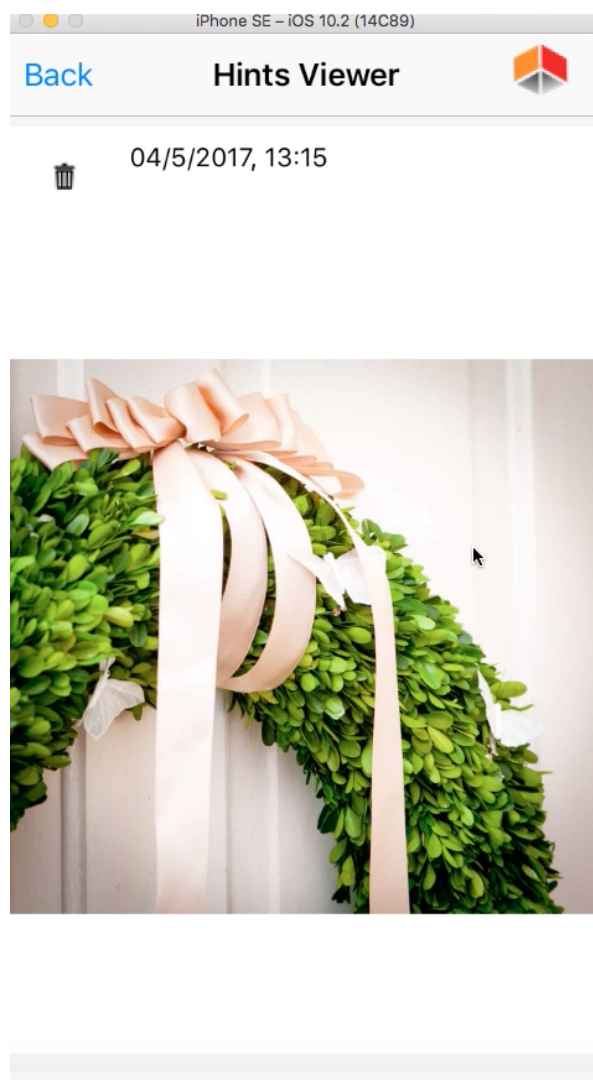


COLOR HINTS



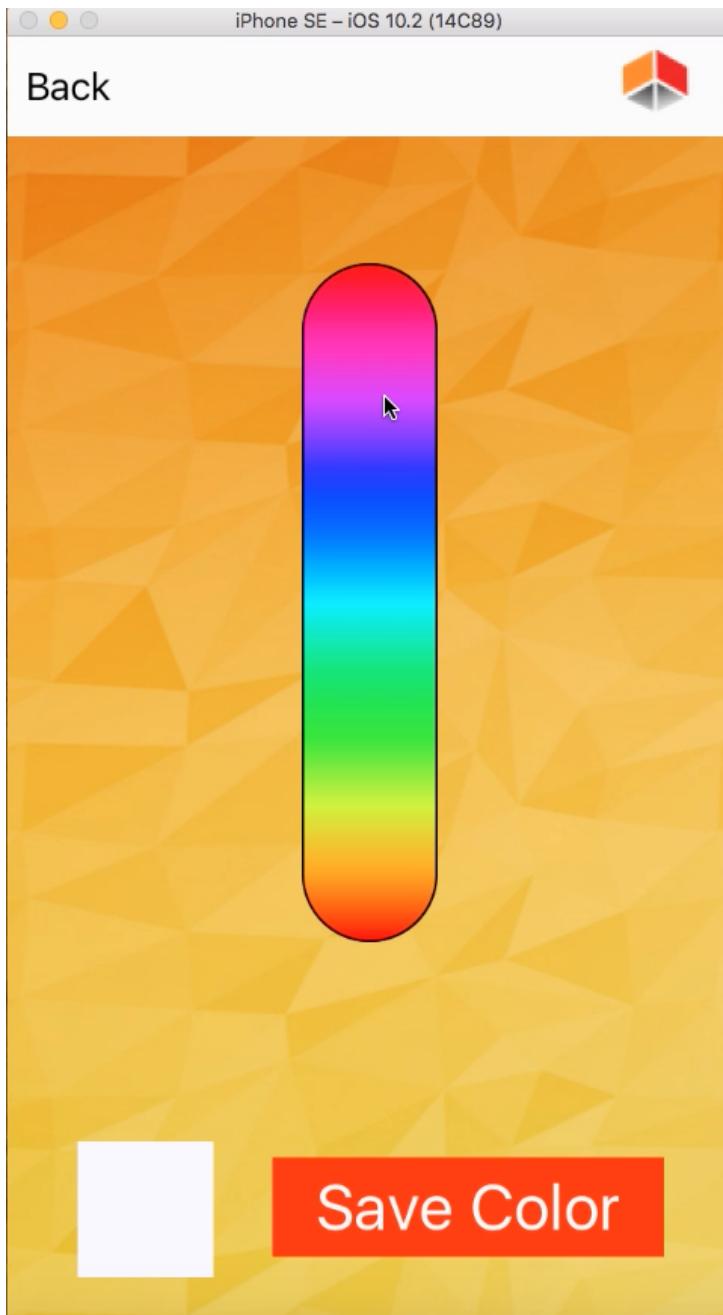
SAVE COLOR HINT ITEM

## COLOR HINTS VIEWER IOS

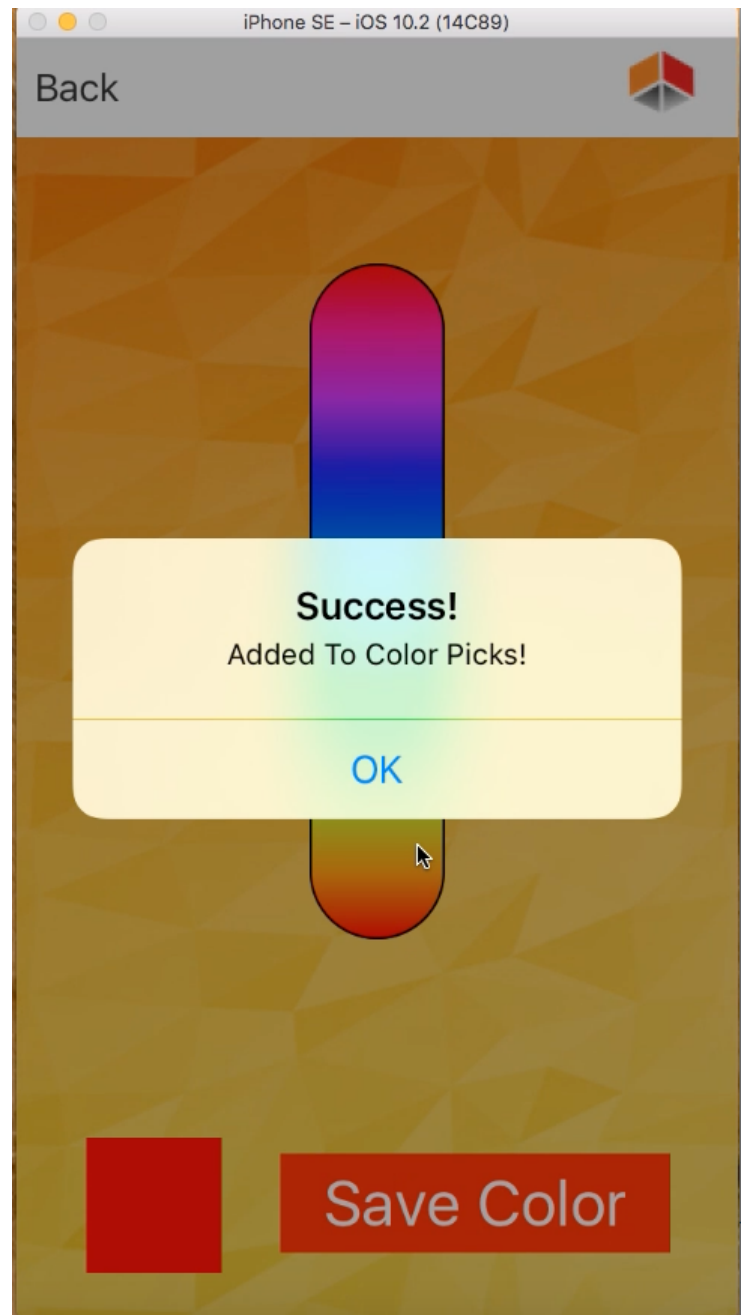




## COLOR PICKER IOS



COLOR PICKER

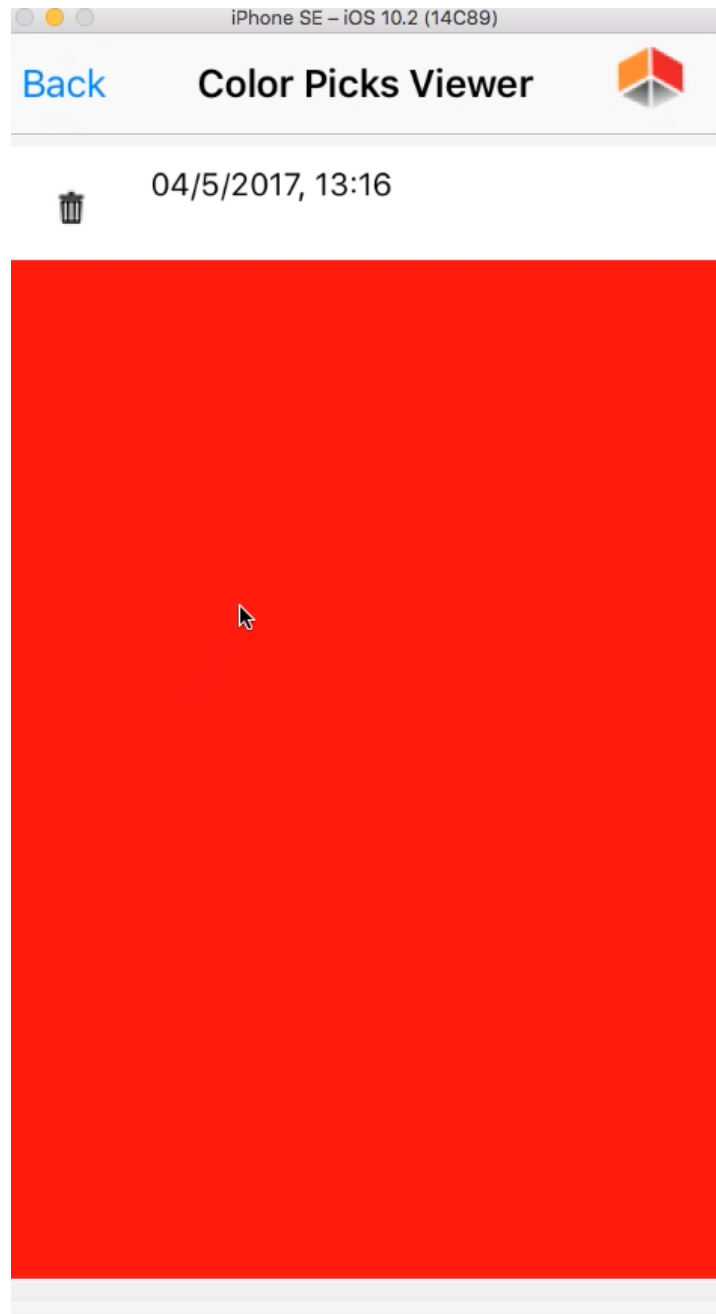


SAVE COLOR PICK

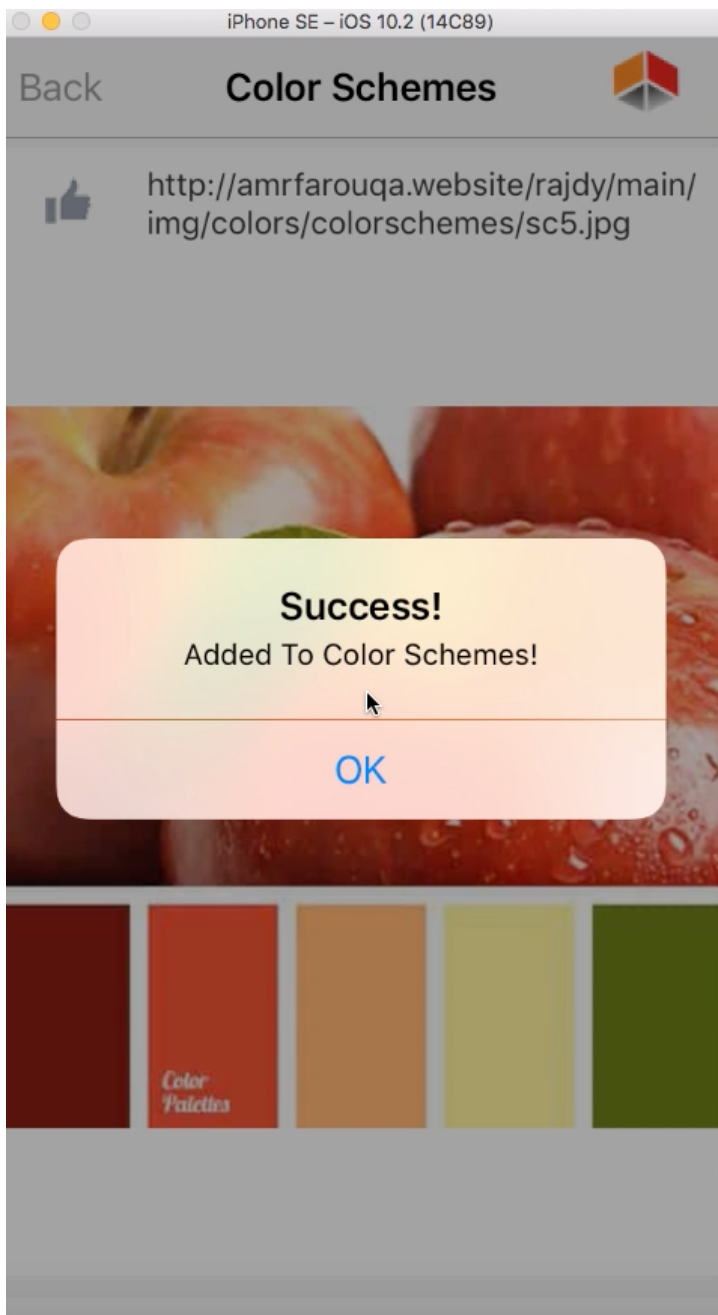


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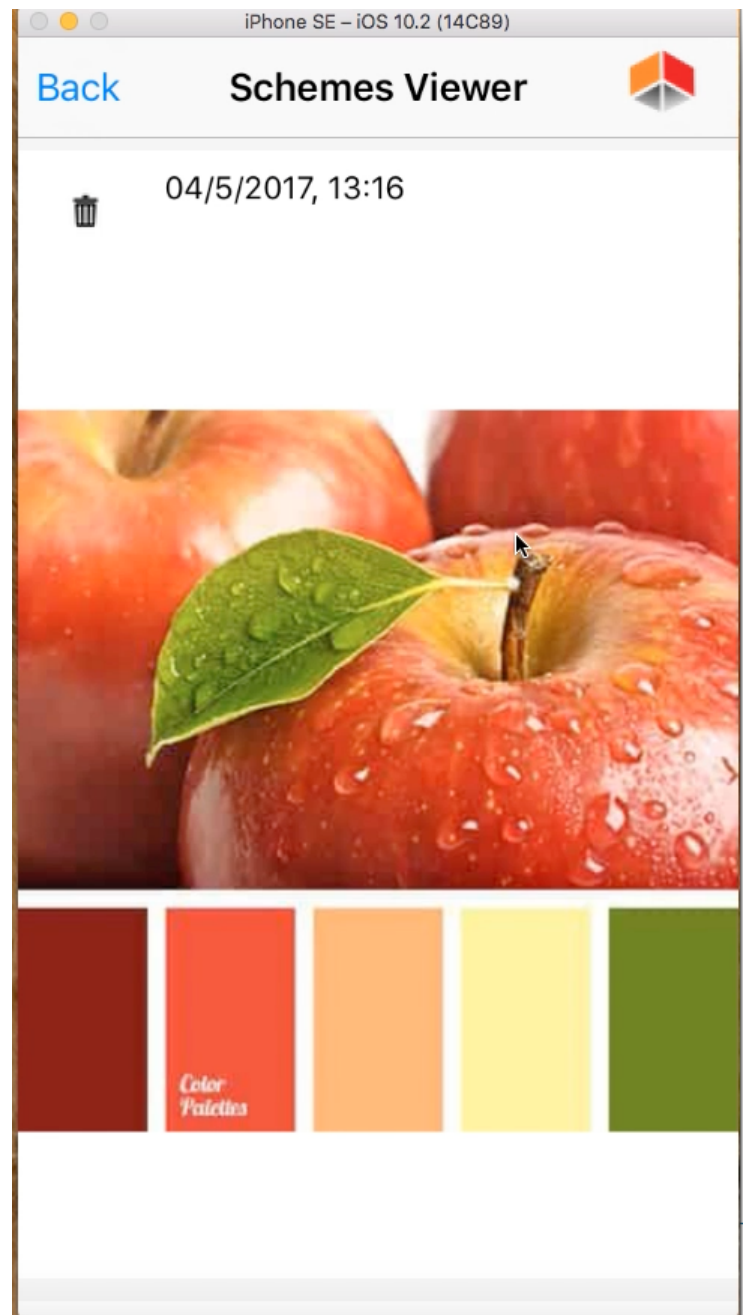
## COLOR PICK VIEWER IOS



## COLOR SCHEME IOS



SAVE SCHEME

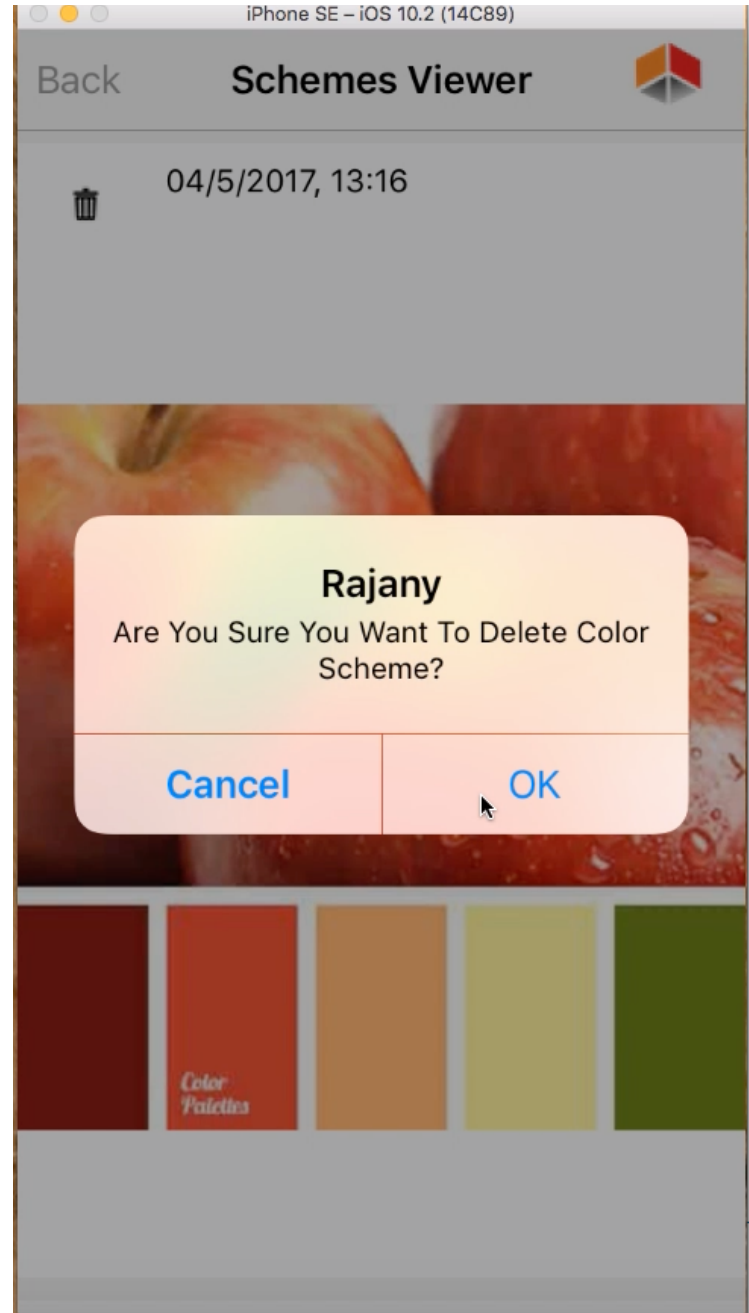


VIEW SAVED

## COLOR SCHEME VIEWER IOS

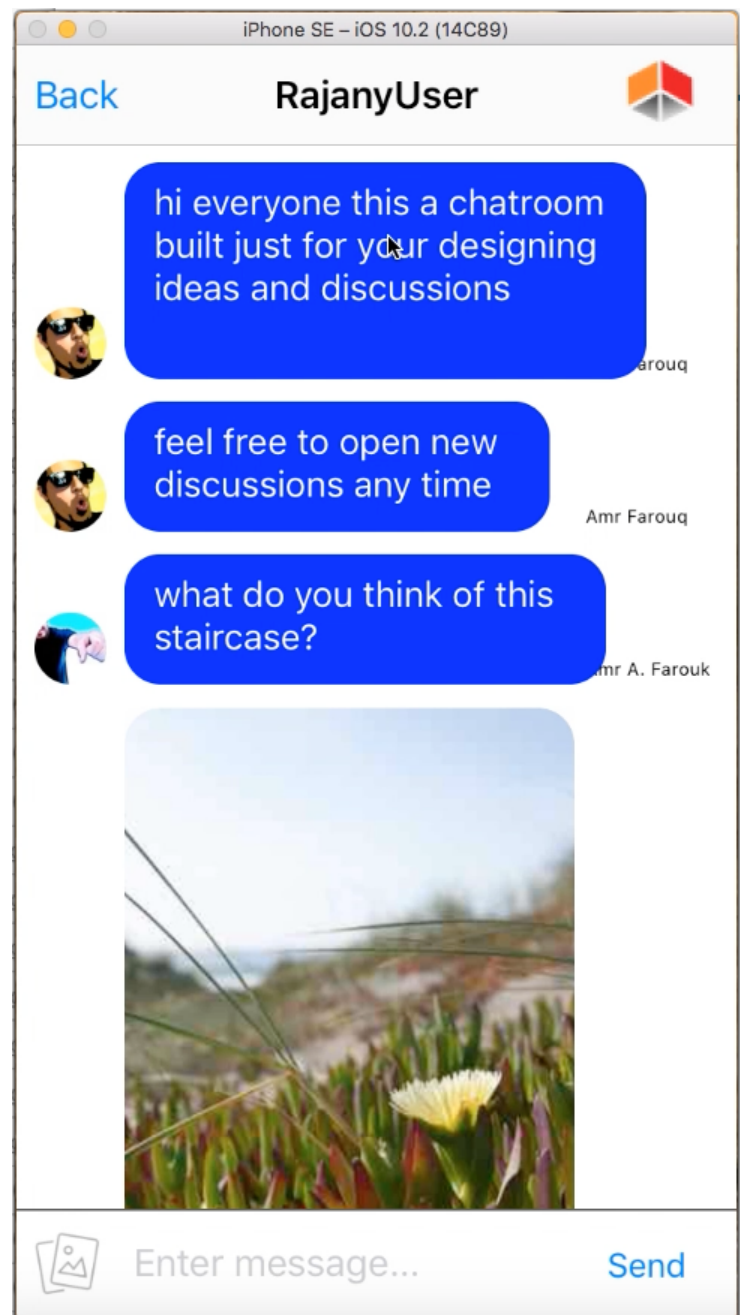
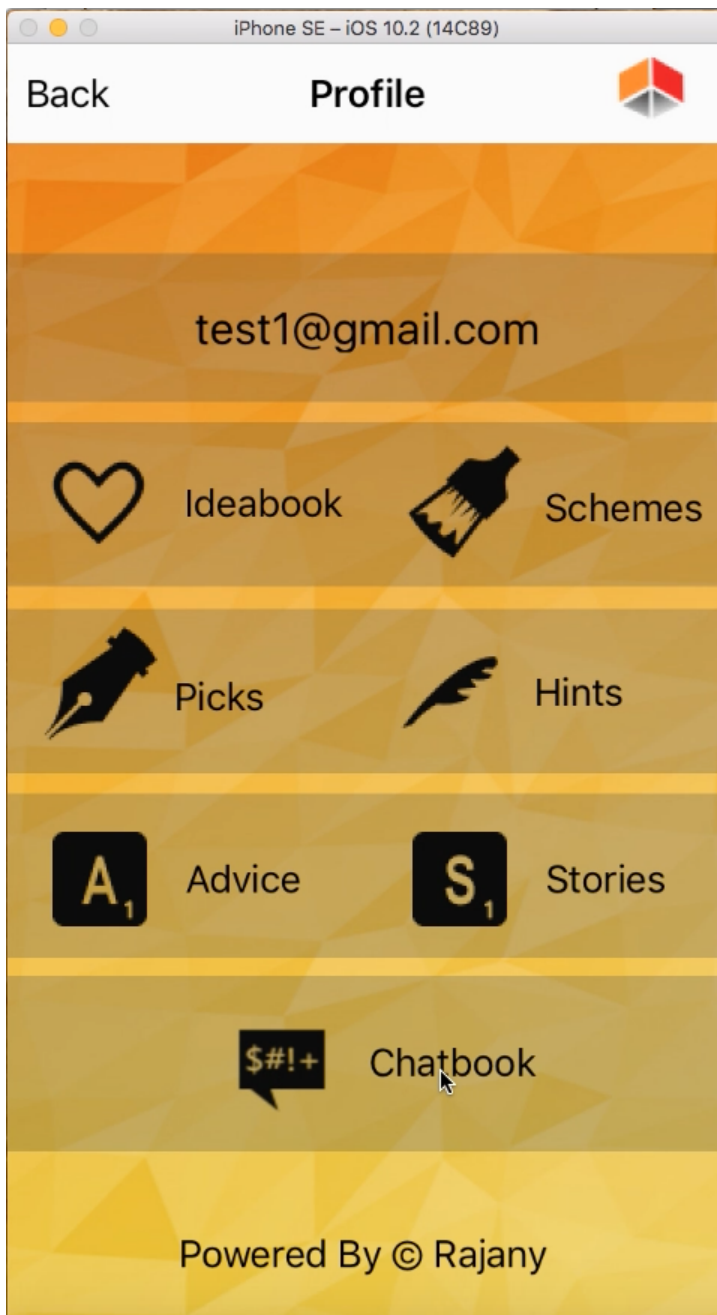


SCHEME VIEWER

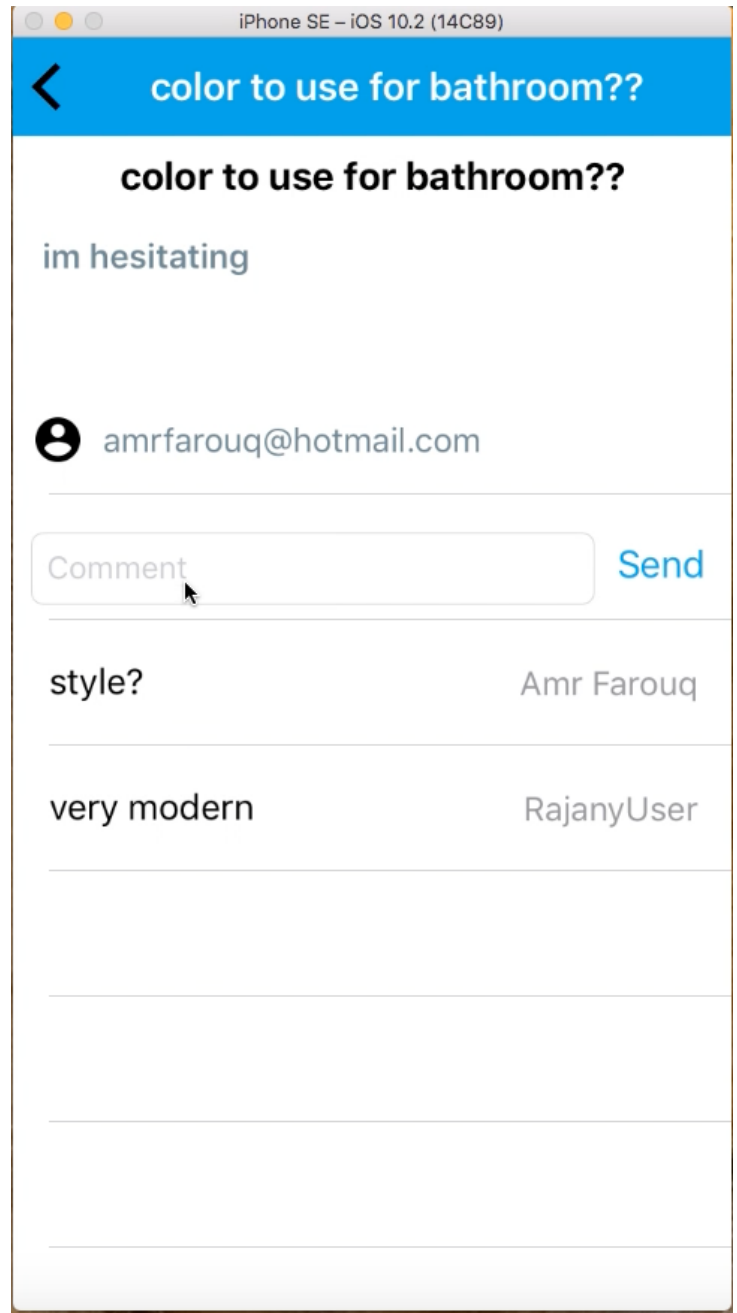
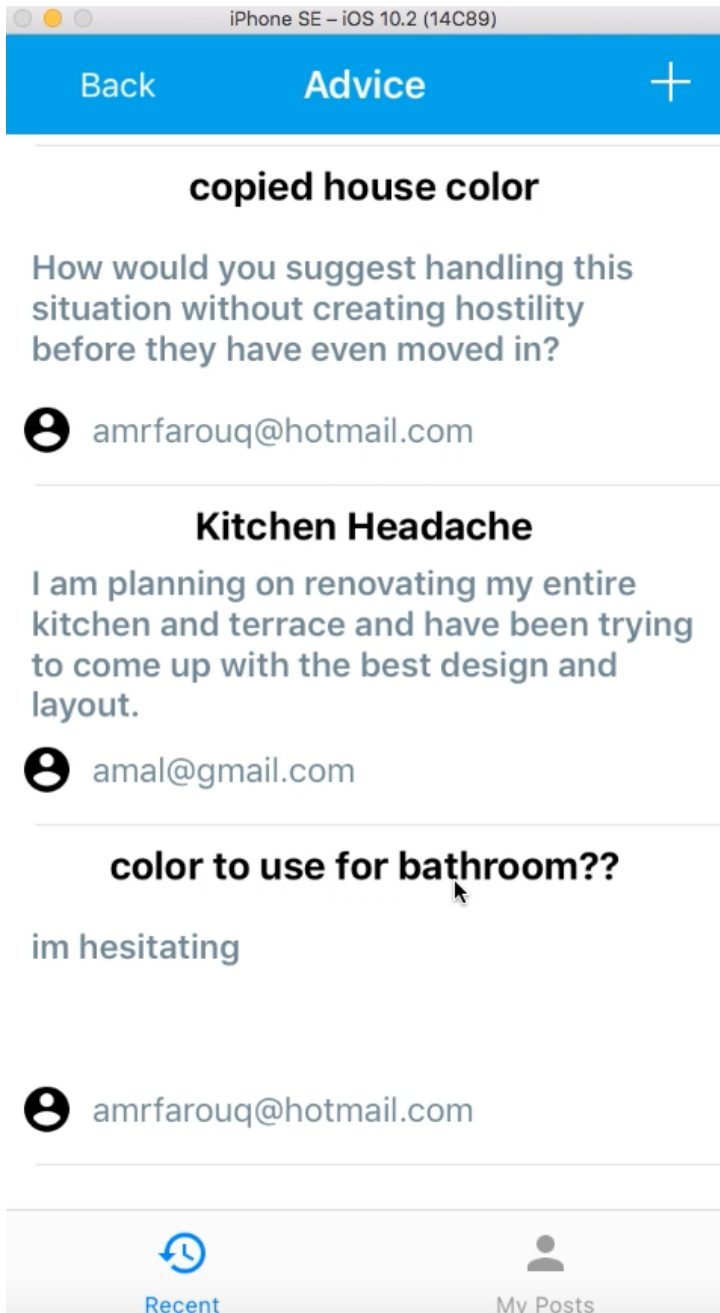


DELETE SCHEME

## CHATBOOK IOS



## ADVICE IOS




## ADVICE COMMENT IOS


iPhone SE – iOS 10.2 (14C89)

< color to use for bathroom??

color to use for bathroom??

im hesitating

 amrfarouq@hotmail.com

try red! 

style? Amr Farouq


very modern RajanyUser


iPhone SE – iOS 10.2 (14C89)

< color to use for bathroom??

color to use for bathroom??

im hesitating

 amrfarouq@hotmail.com

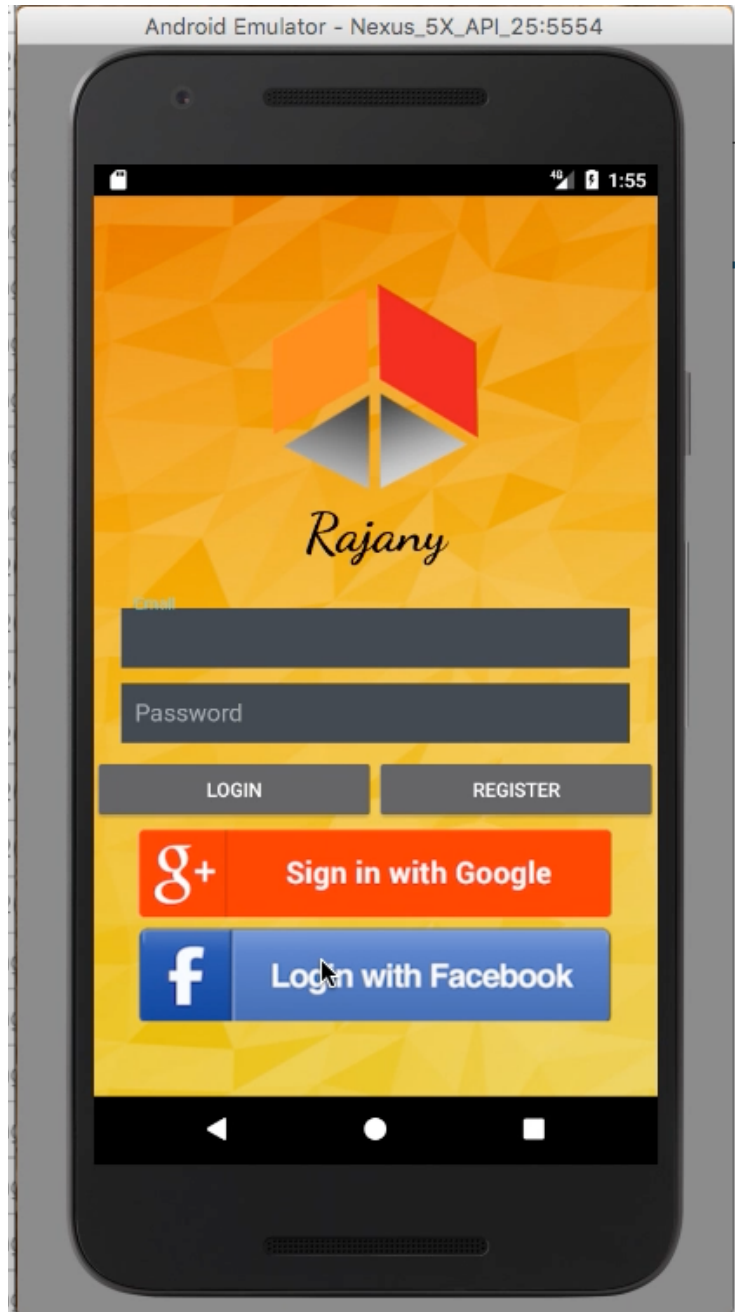
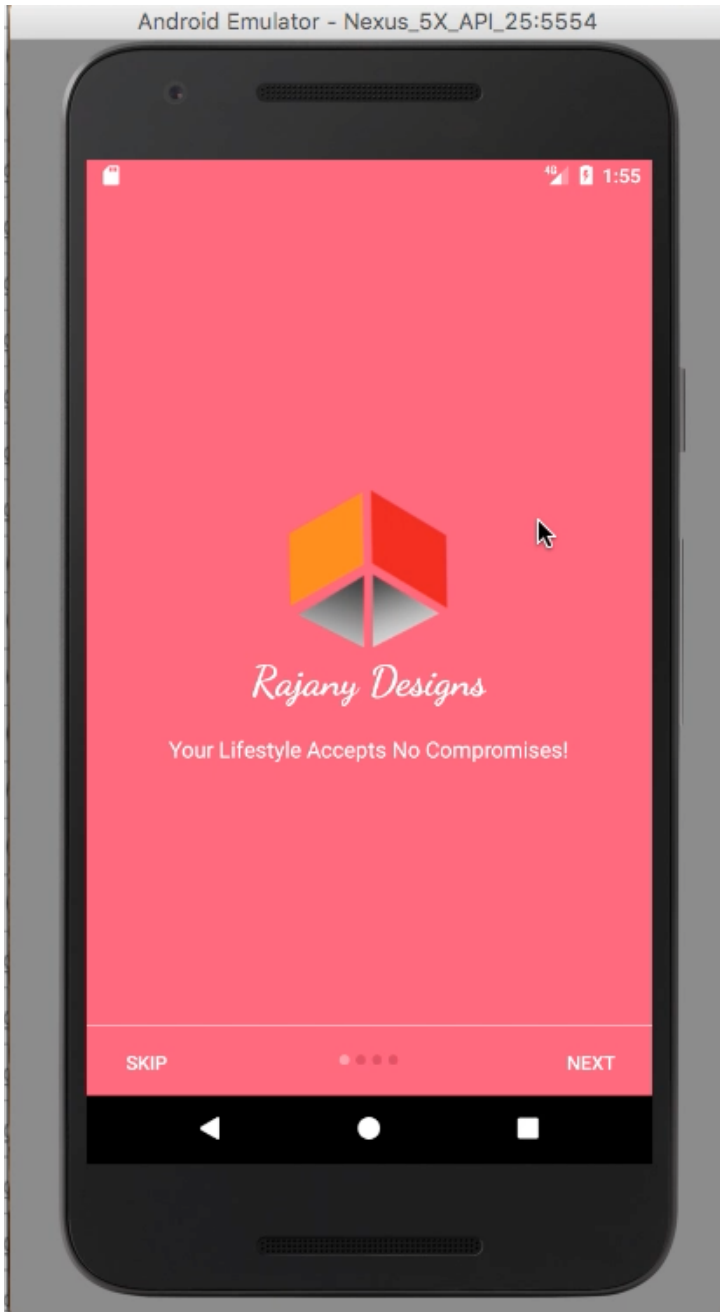
Comment 

style? Amr Farouq

very modern RajanyUser

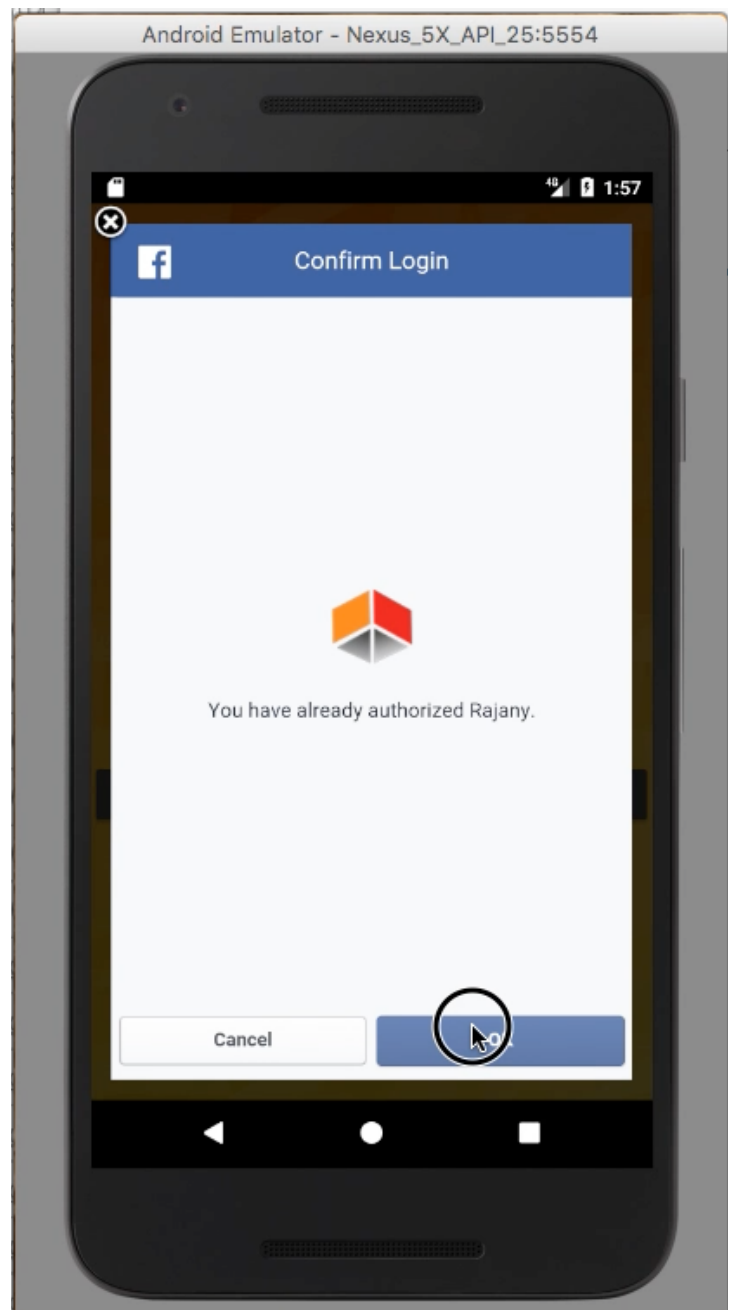
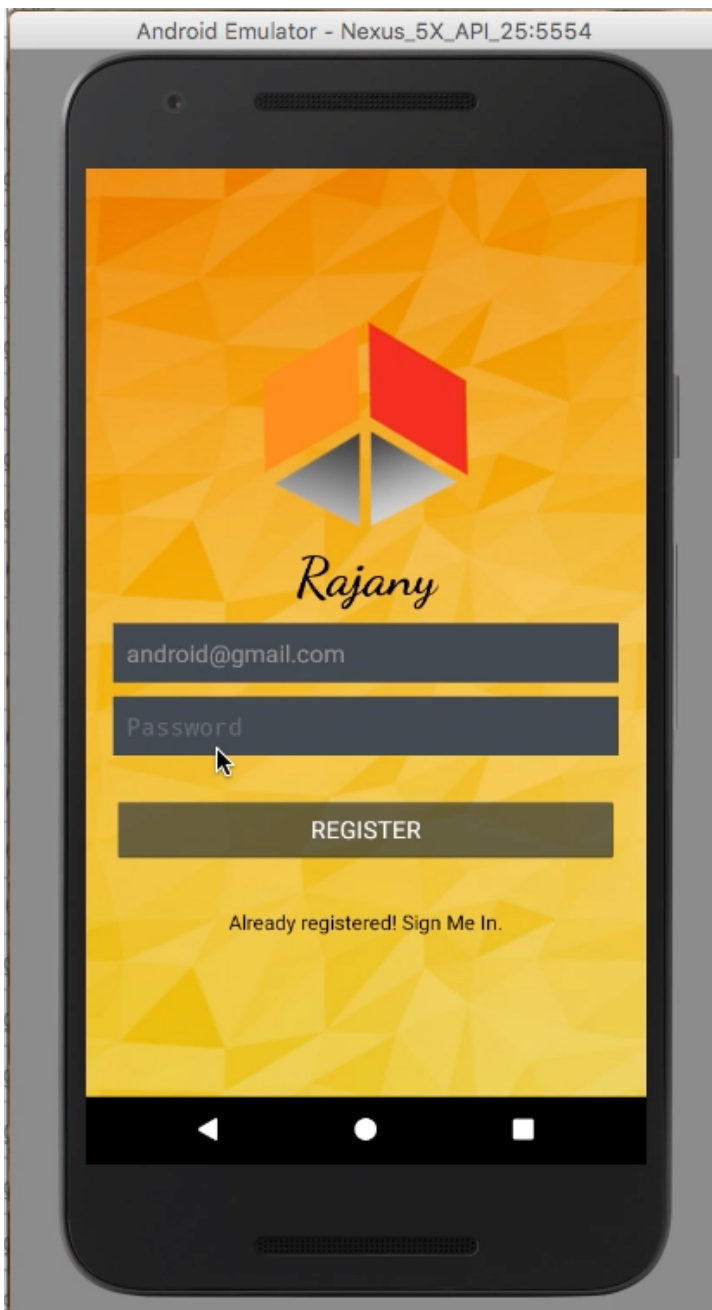
try red! RajanyUser

## INTRO ANDROID

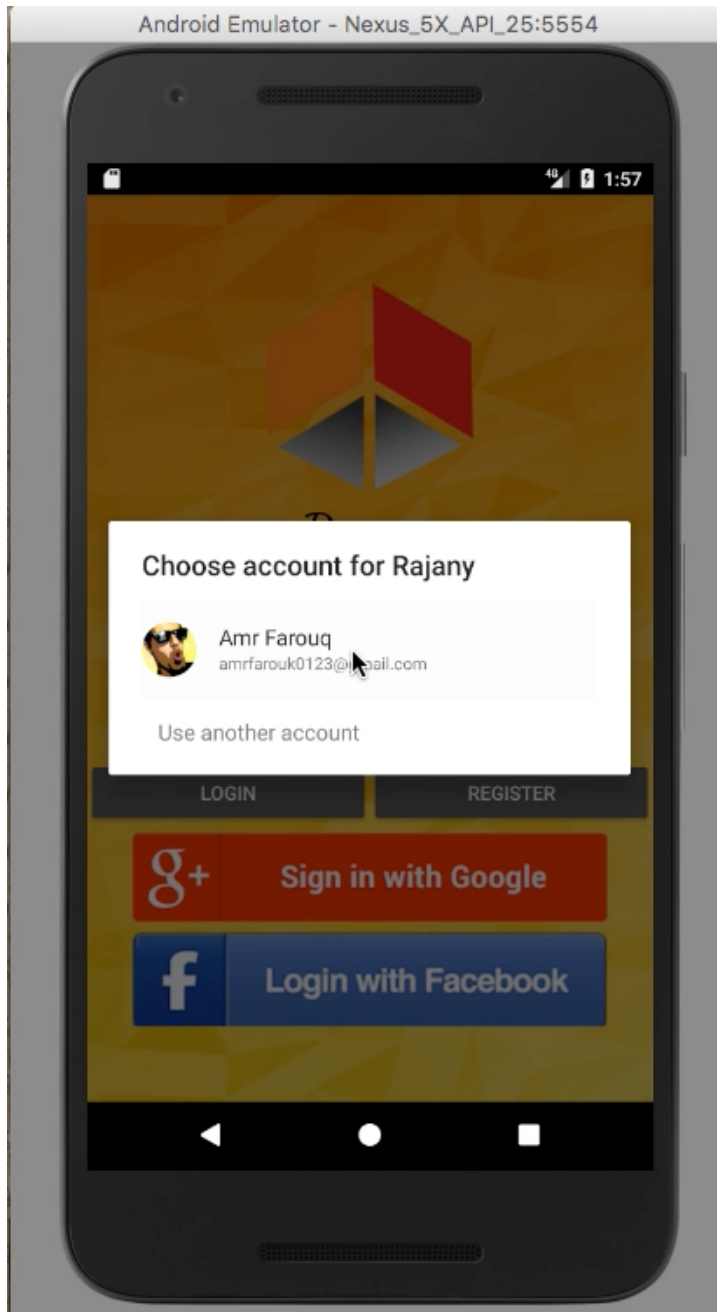




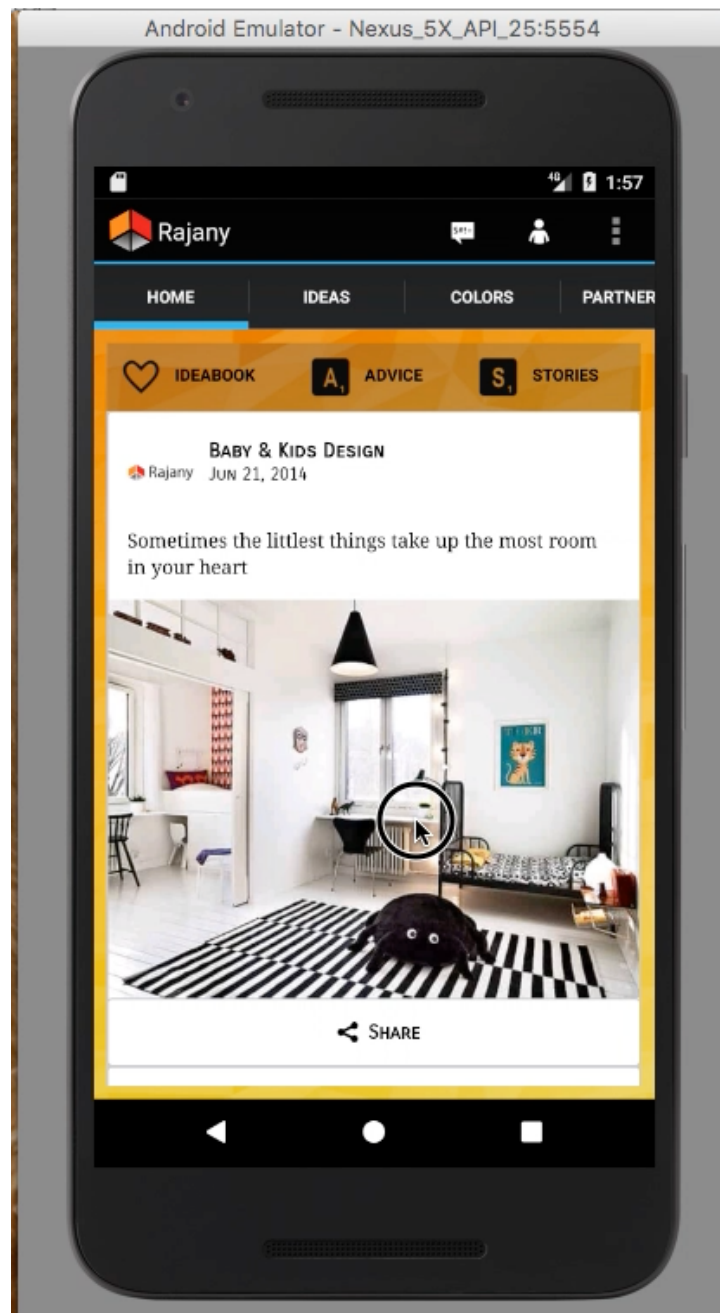
## SIGN IN METHODS ANDROID



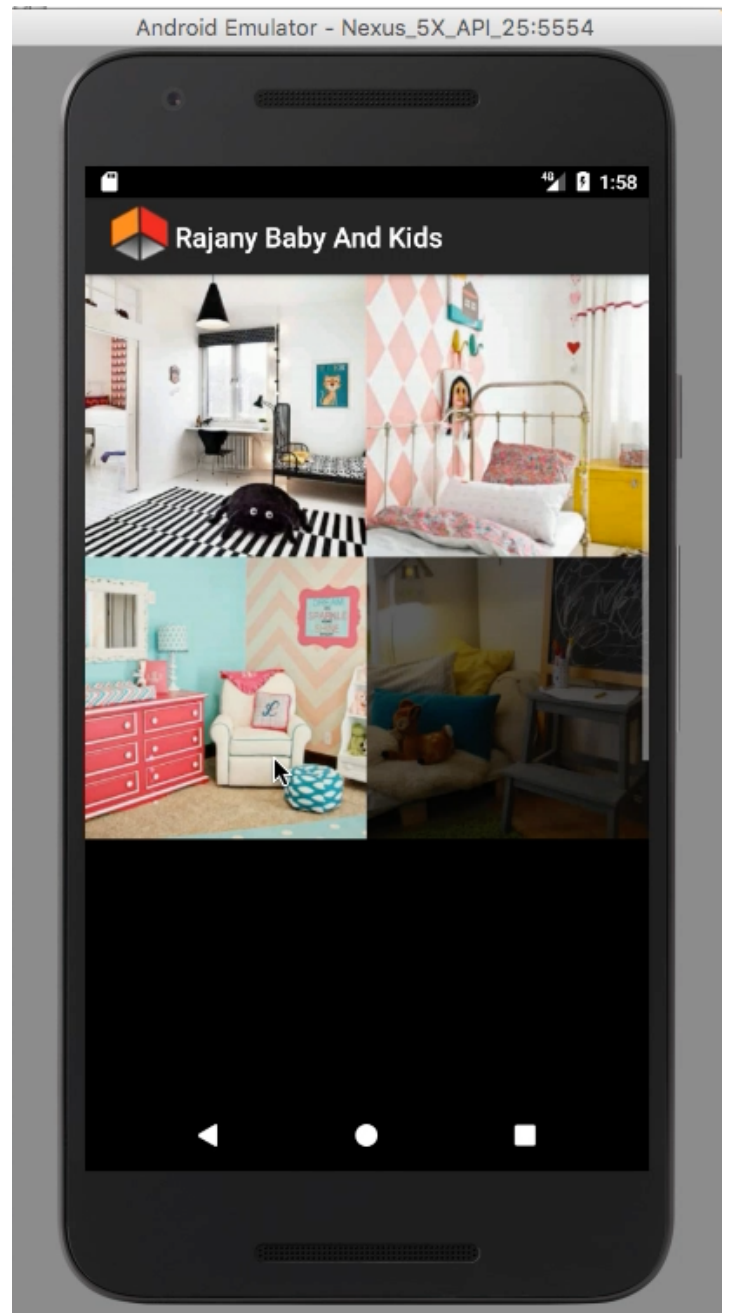




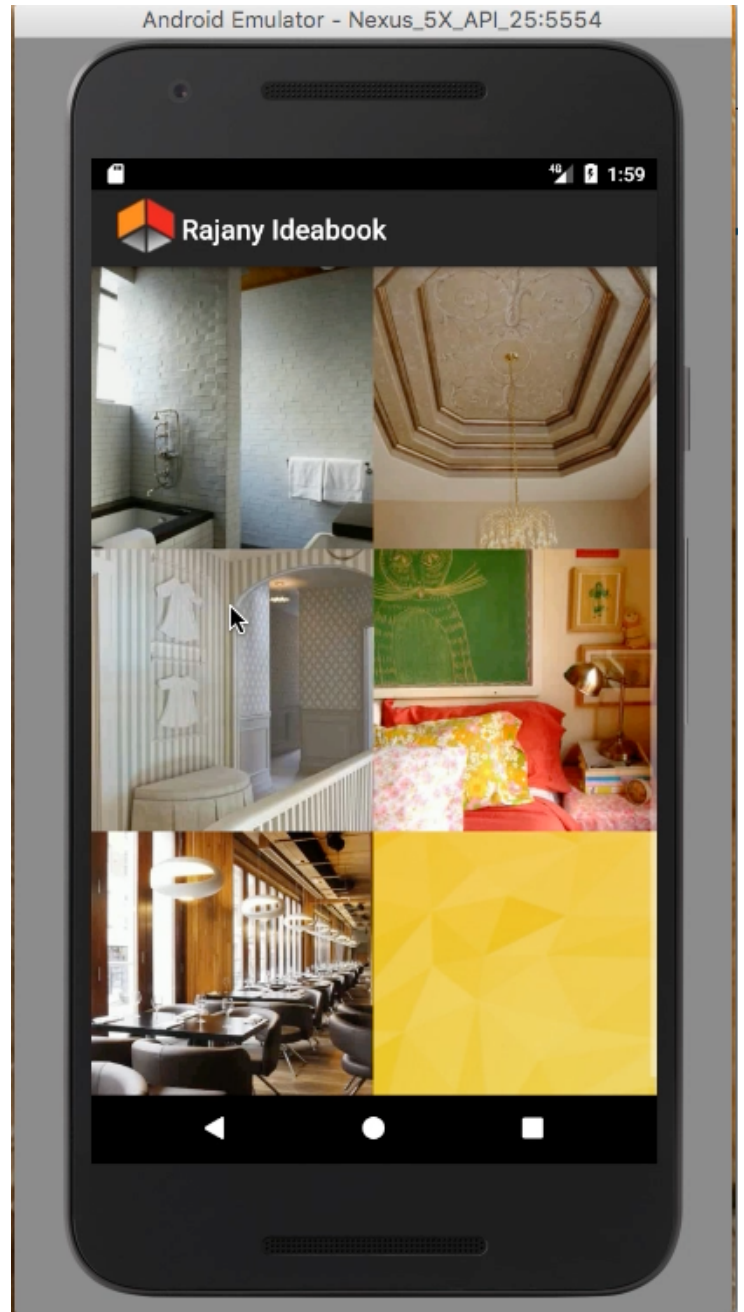
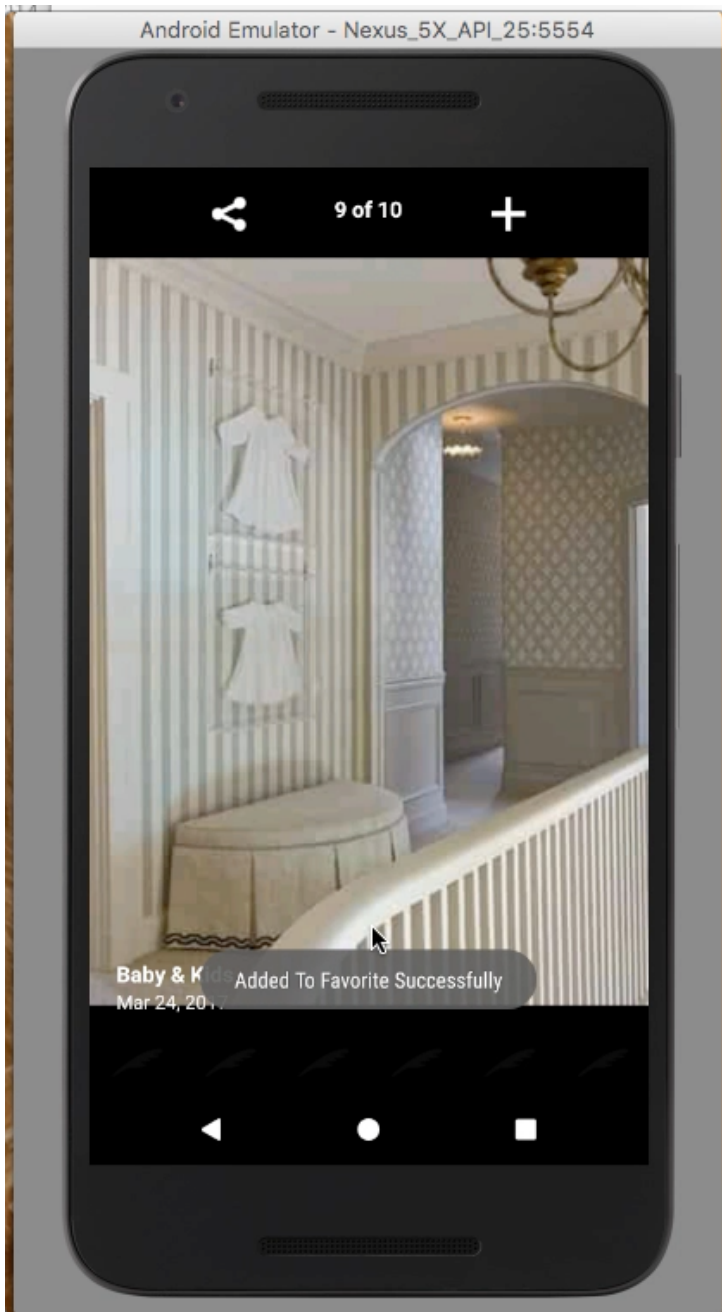
## HOME TAB ANDROID



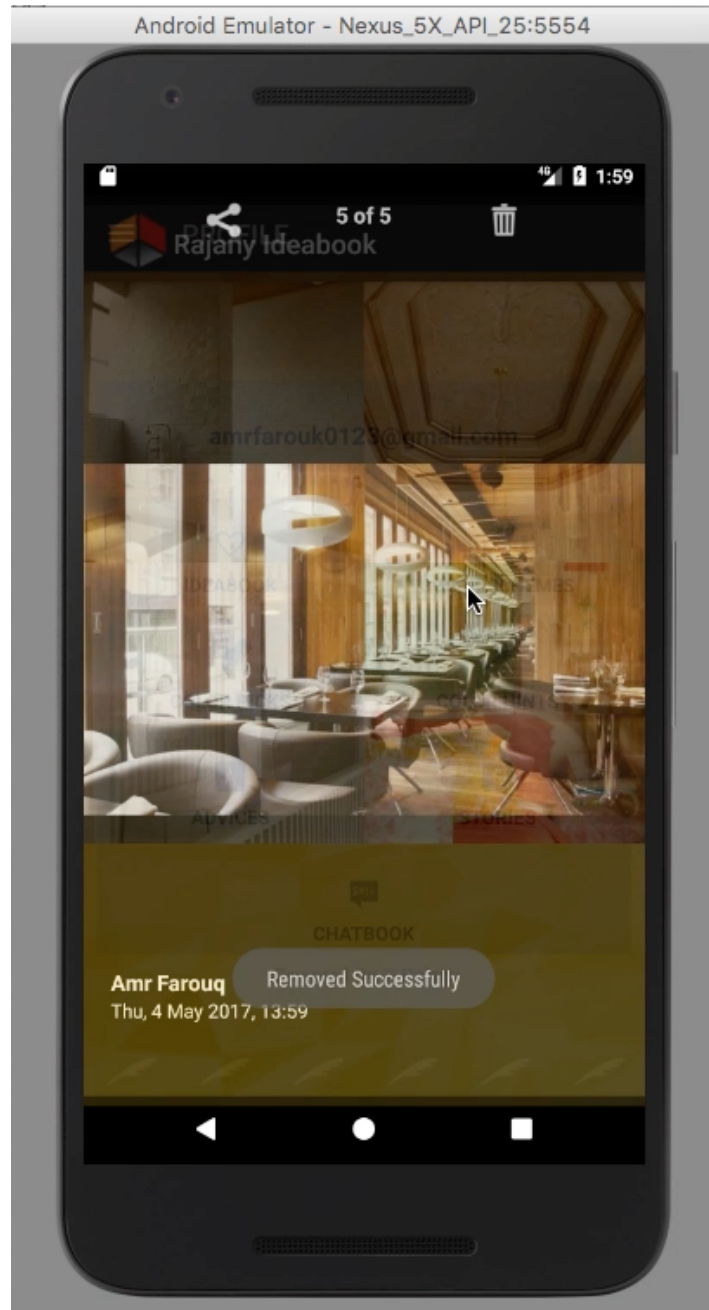
## IDEAS TAB ANDROID

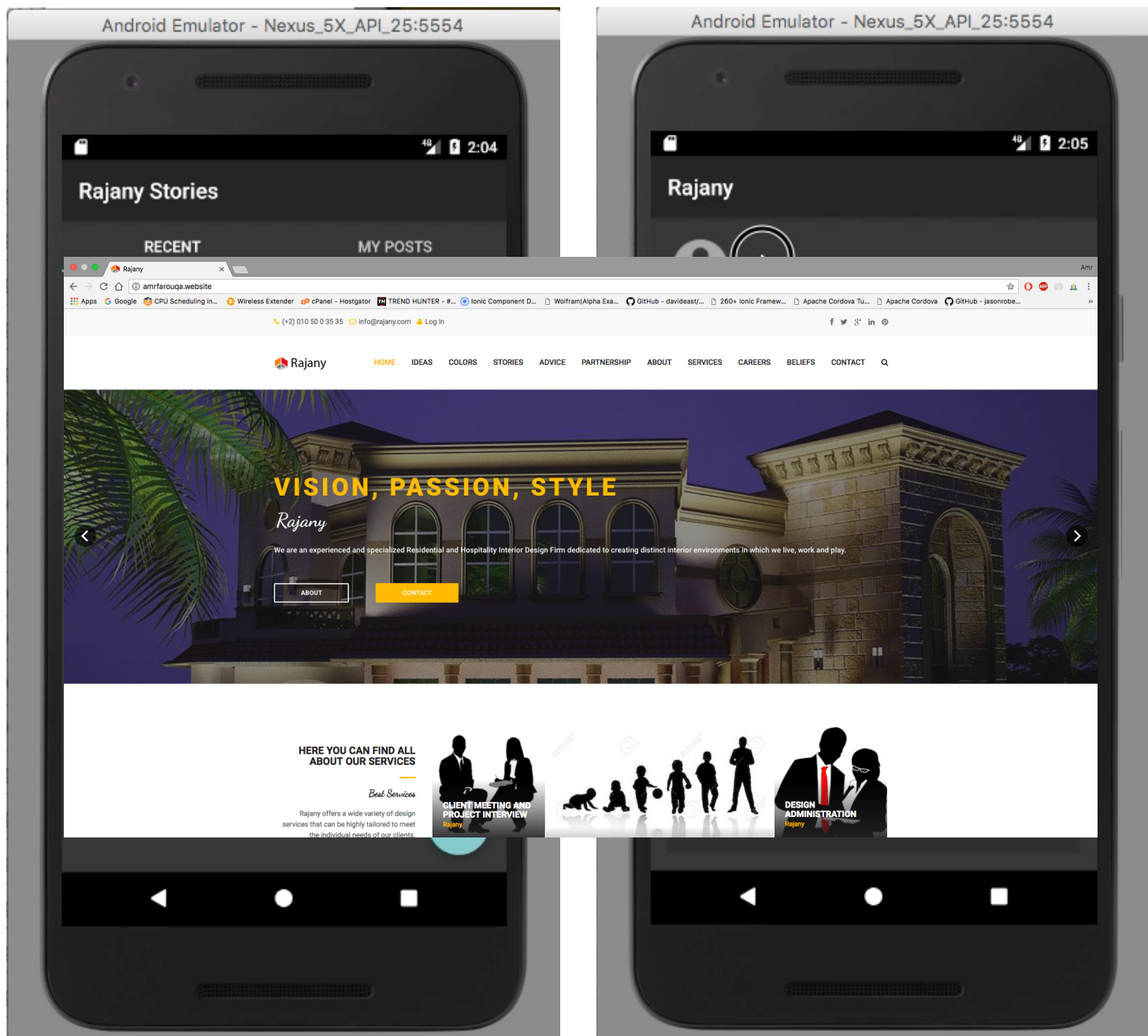


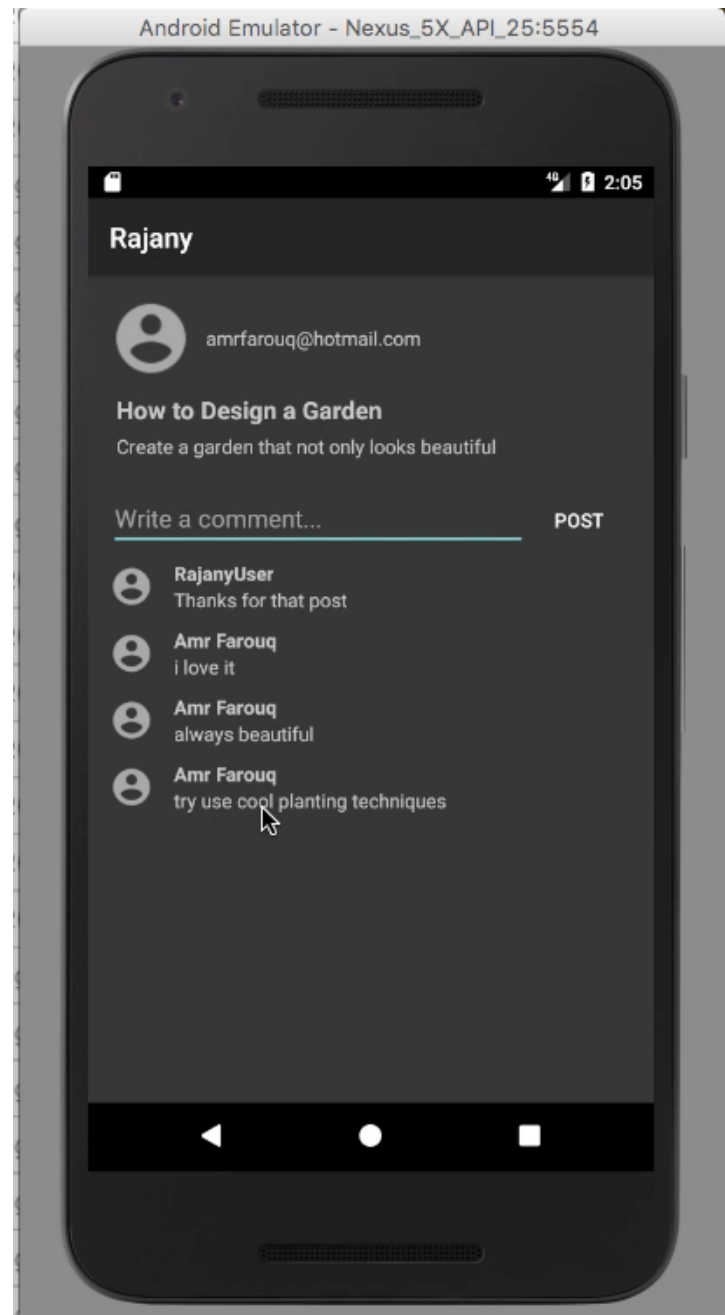
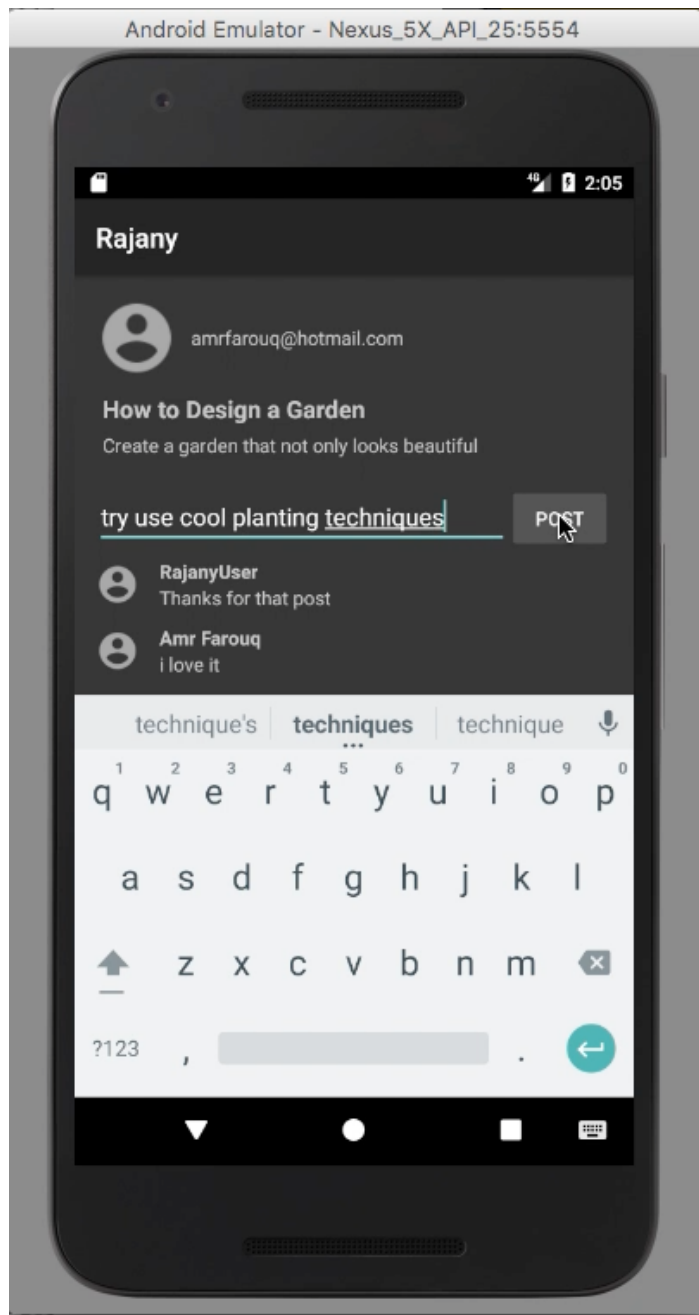






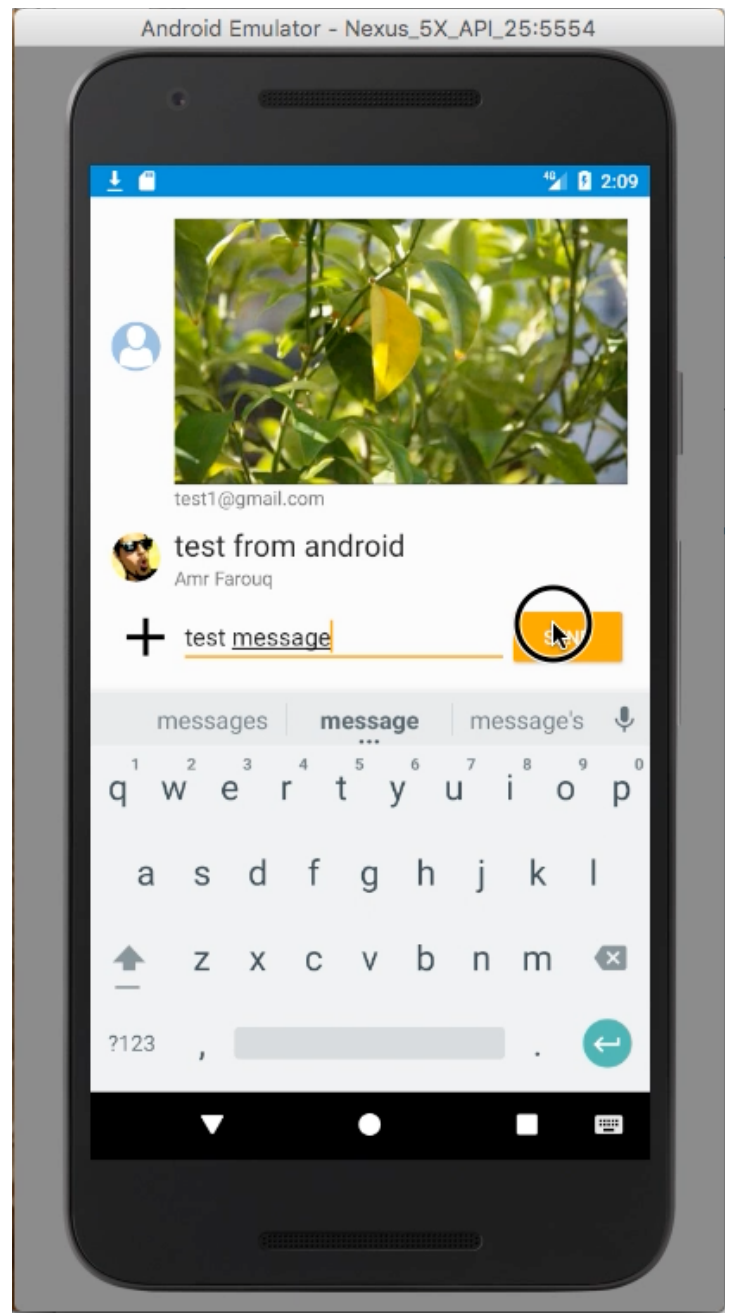
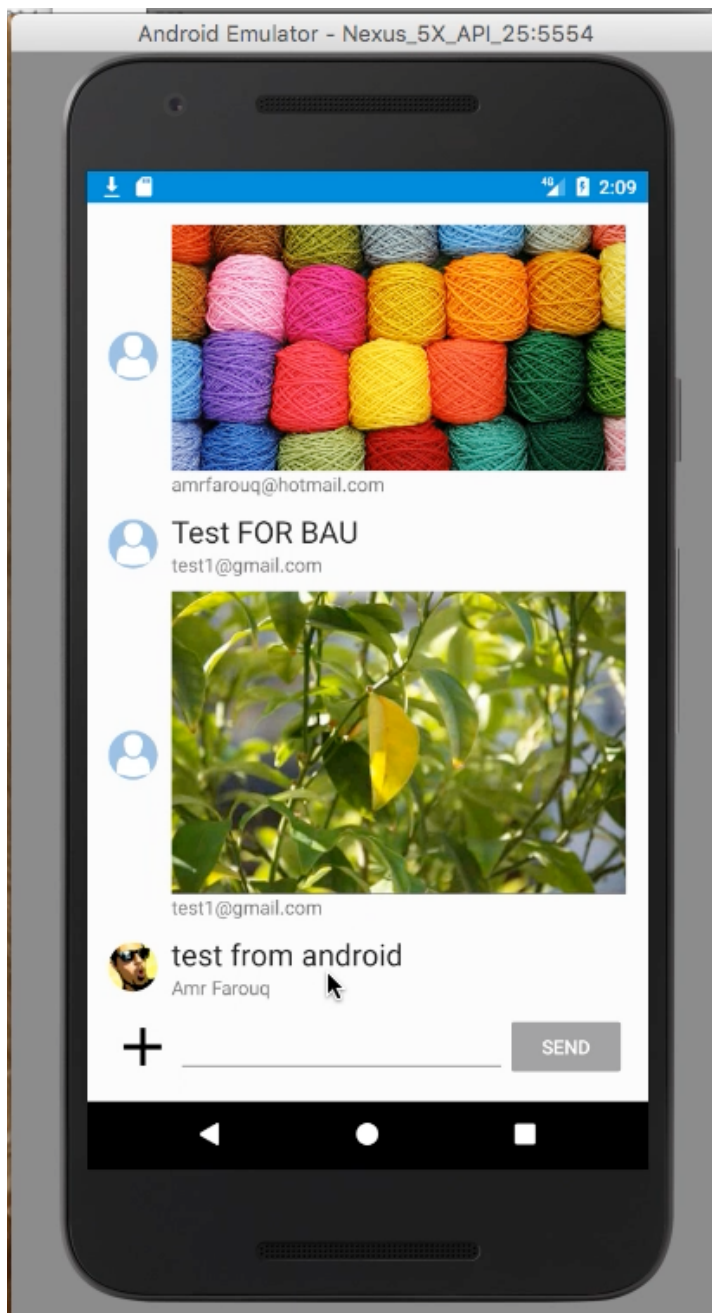


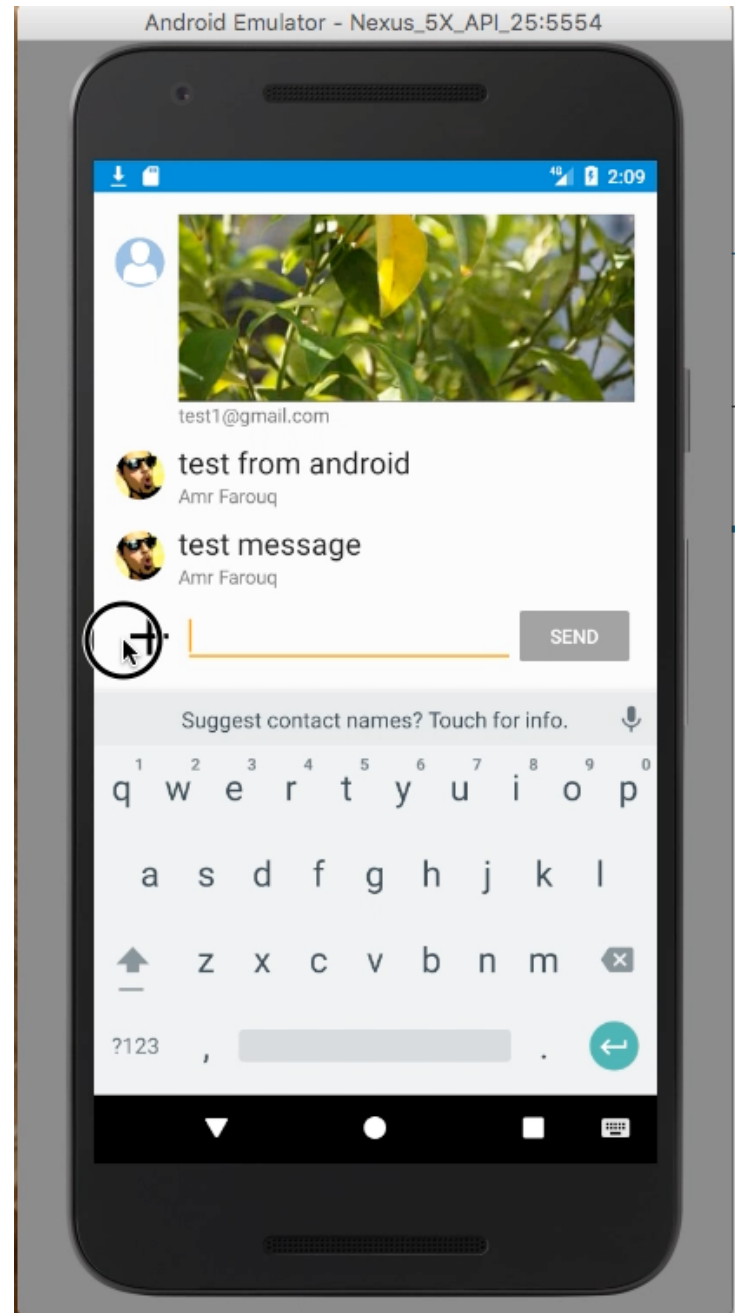
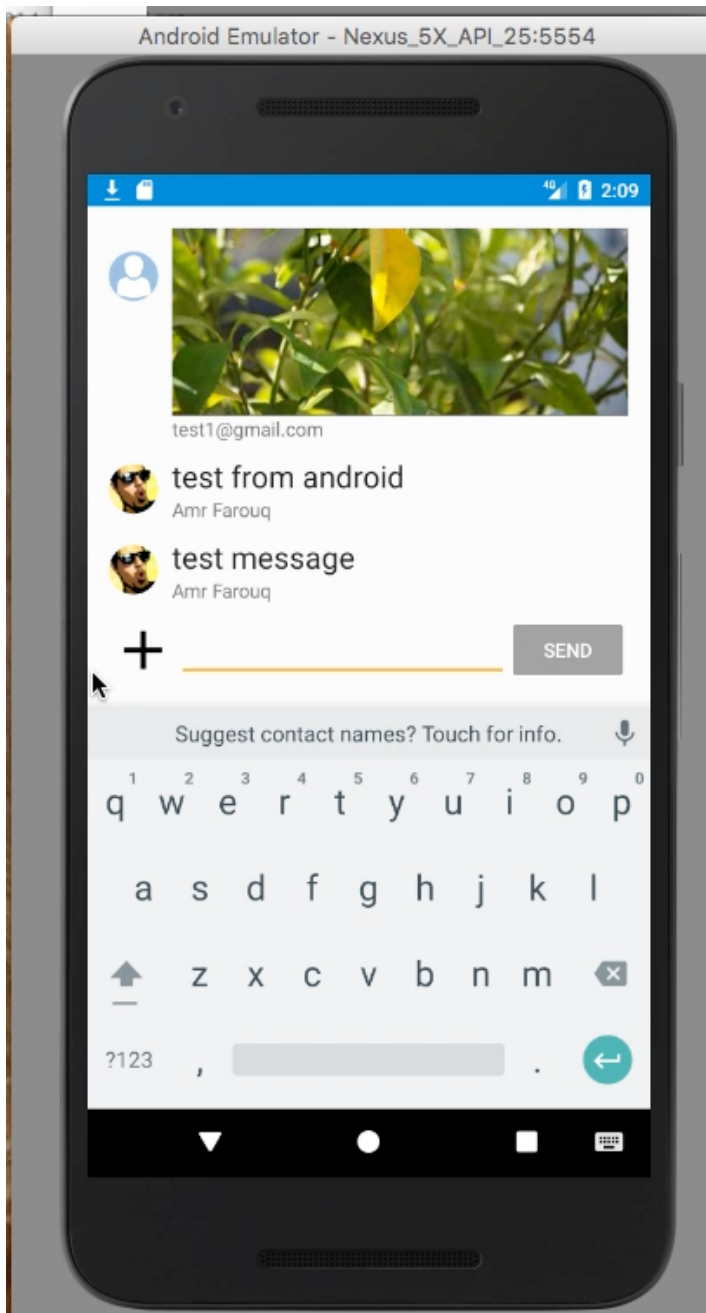


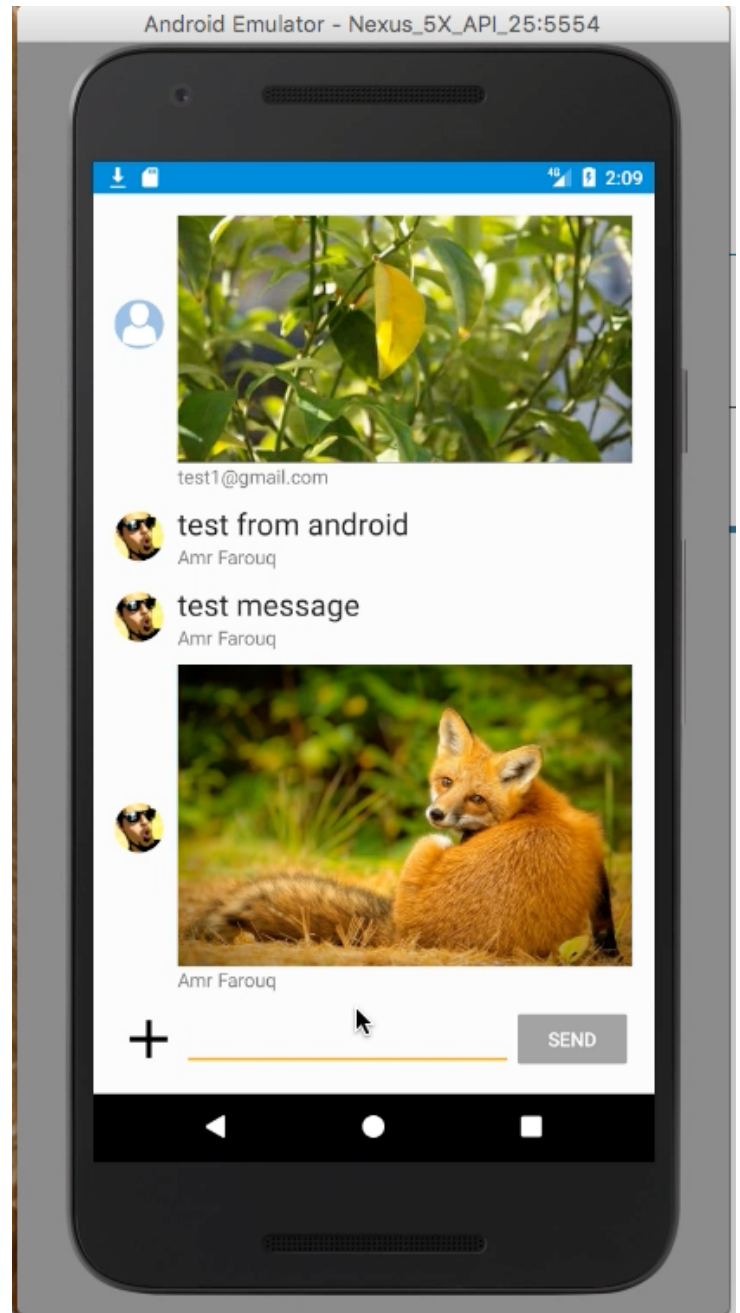
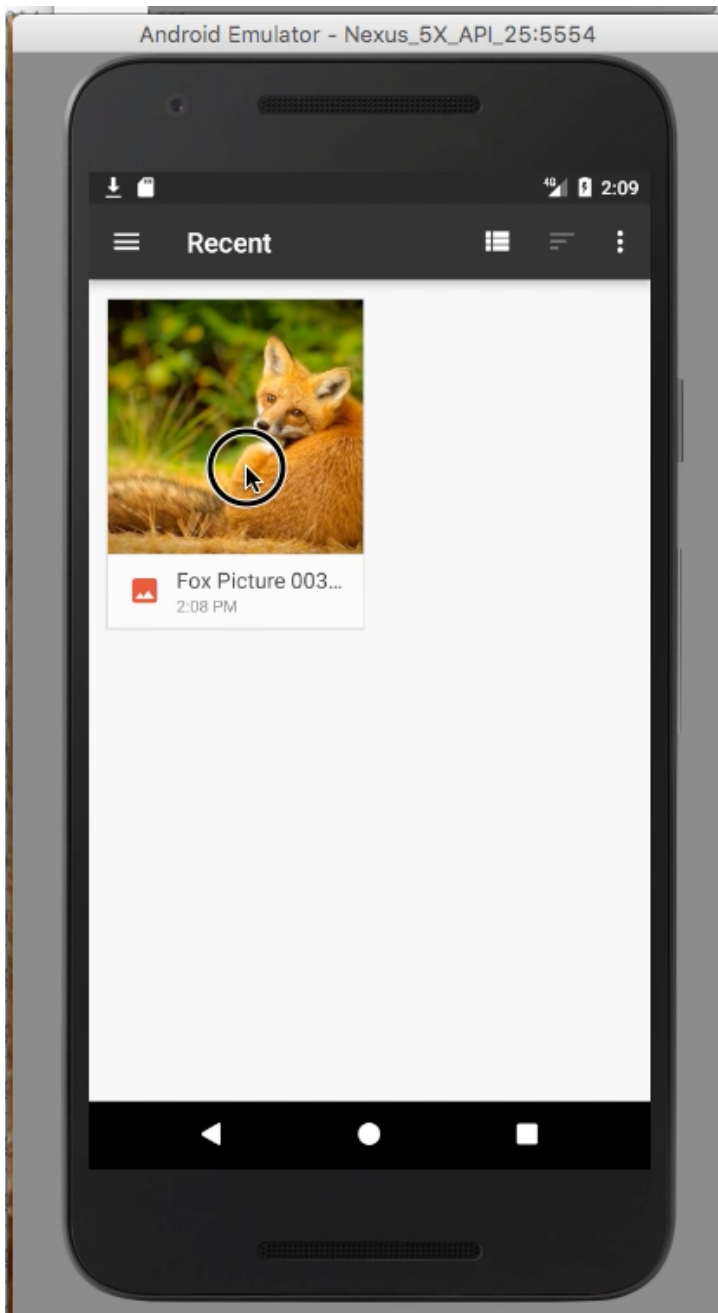




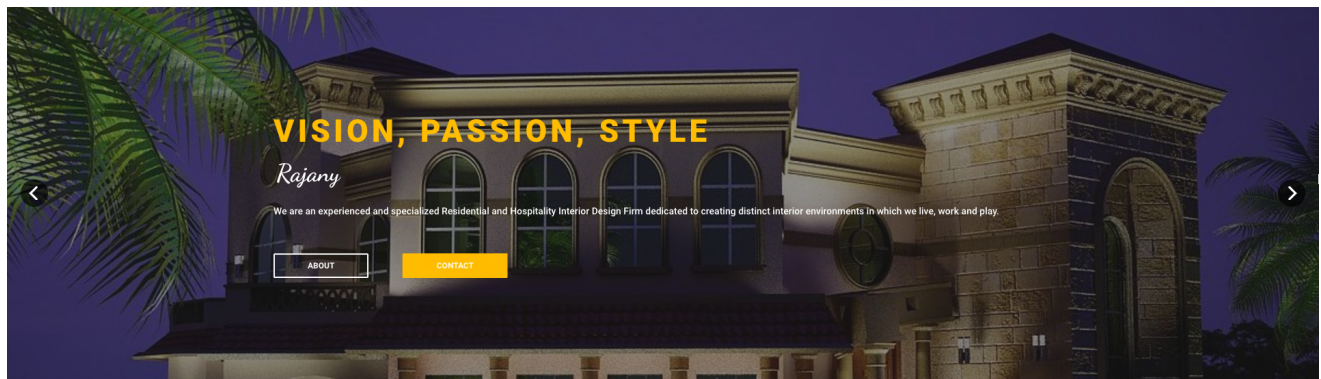
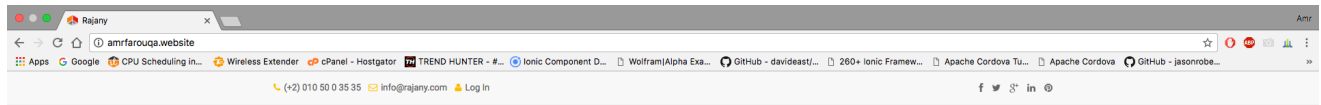
## CHATBOOK ANDROID







# INTRO HOME WEBSITE



## HERE YOU CAN FIND ALL ABOUT OUR SERVICES

### Best Services

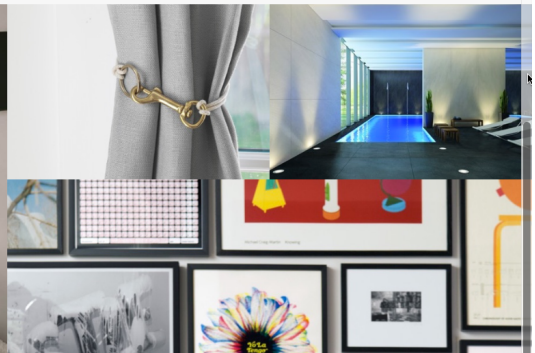
Rajany offers a wide variety of design services that can be highly tailored to meet the individual needs of our clients.



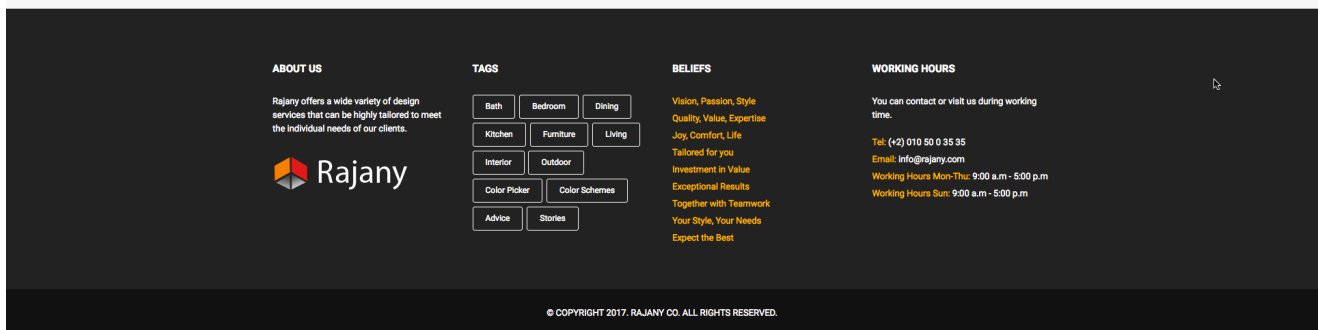
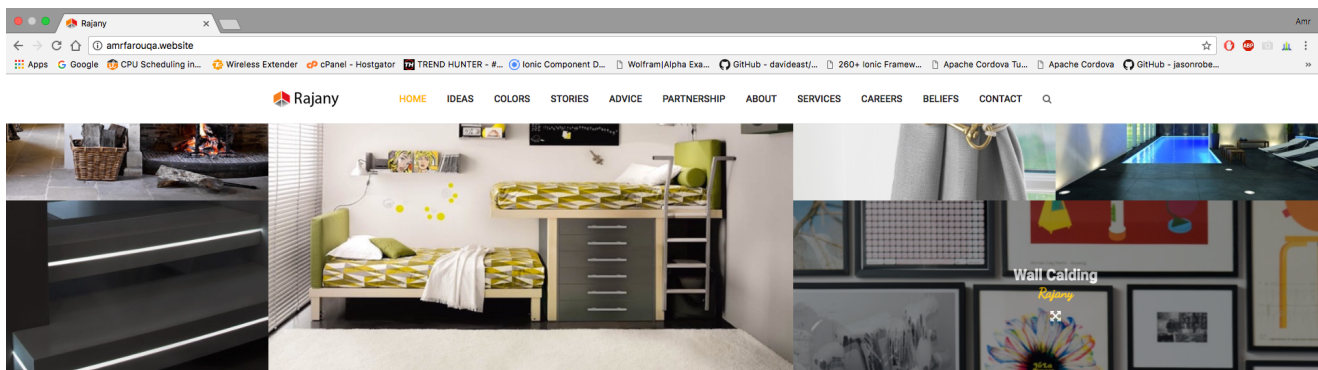
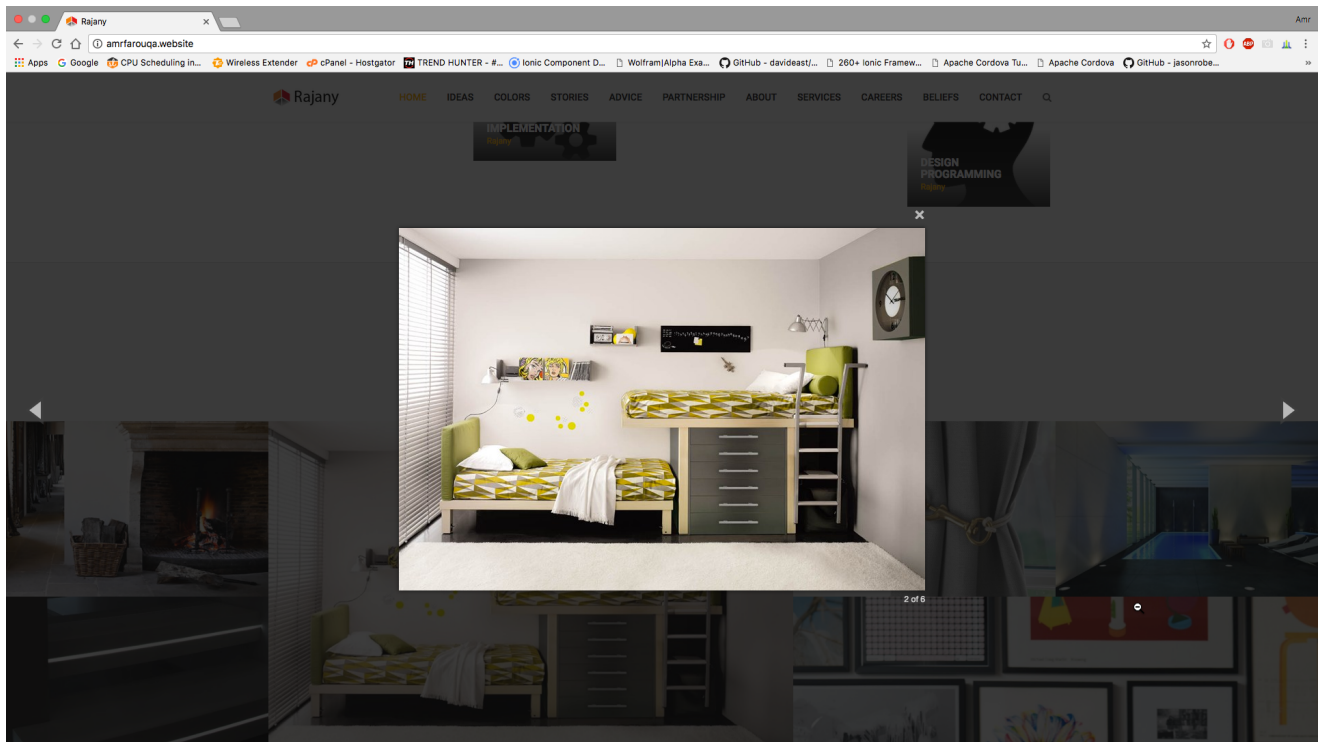
## LATEST IDEAS

### The Best

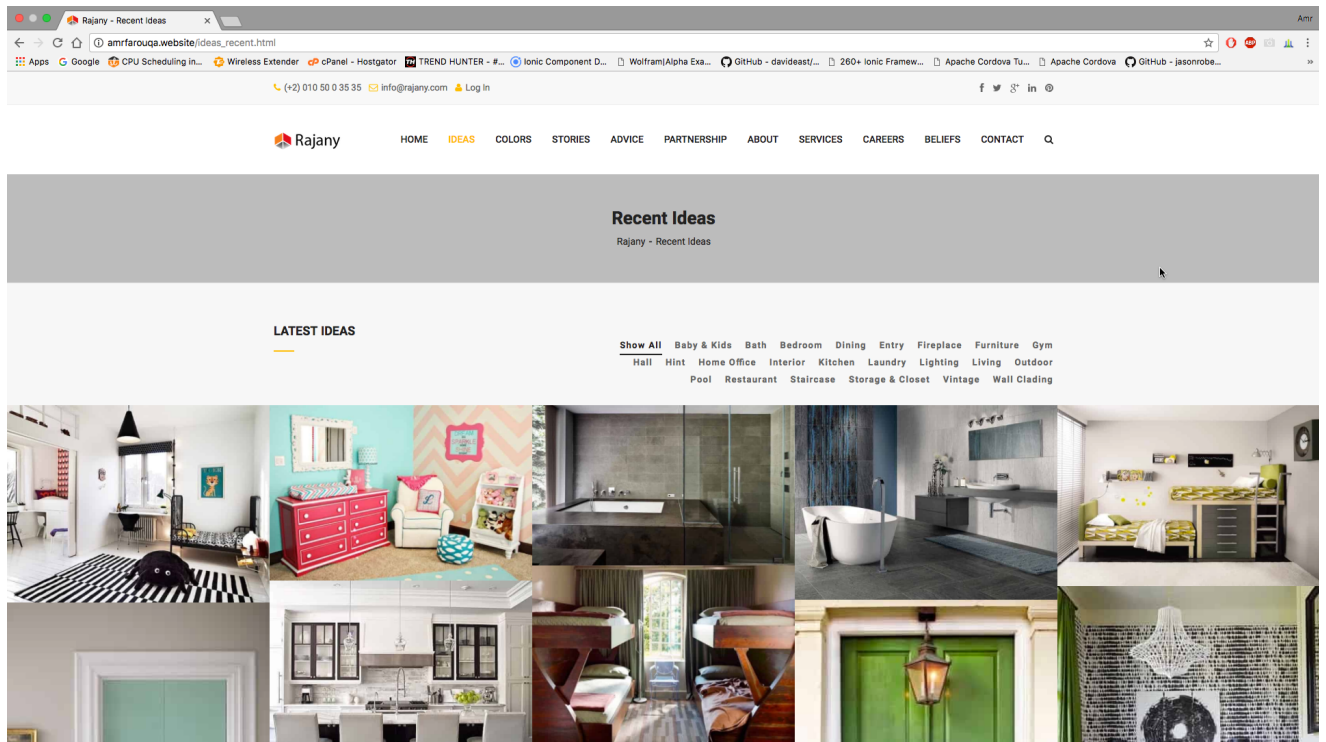
Rajany Co. provides more than 5000 interior/exterior design ideas, these are the top listed ideas.



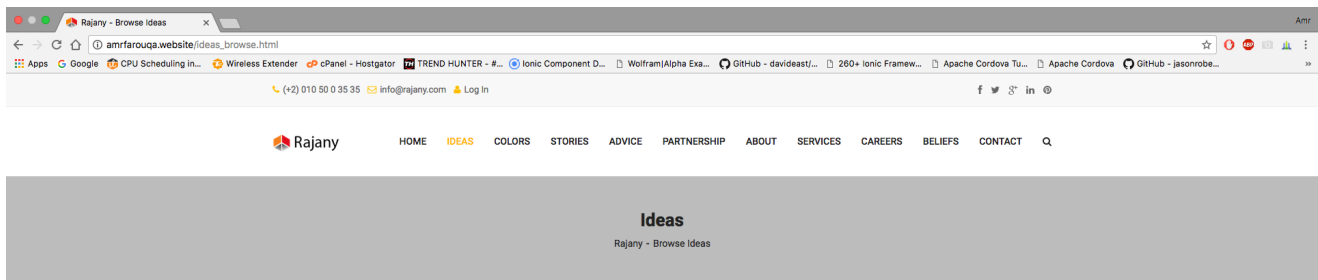




# RECENT IDEAS WEBSITE



# IDEAS WEBSITE



**BABY & KIDS**  
START BROWSING



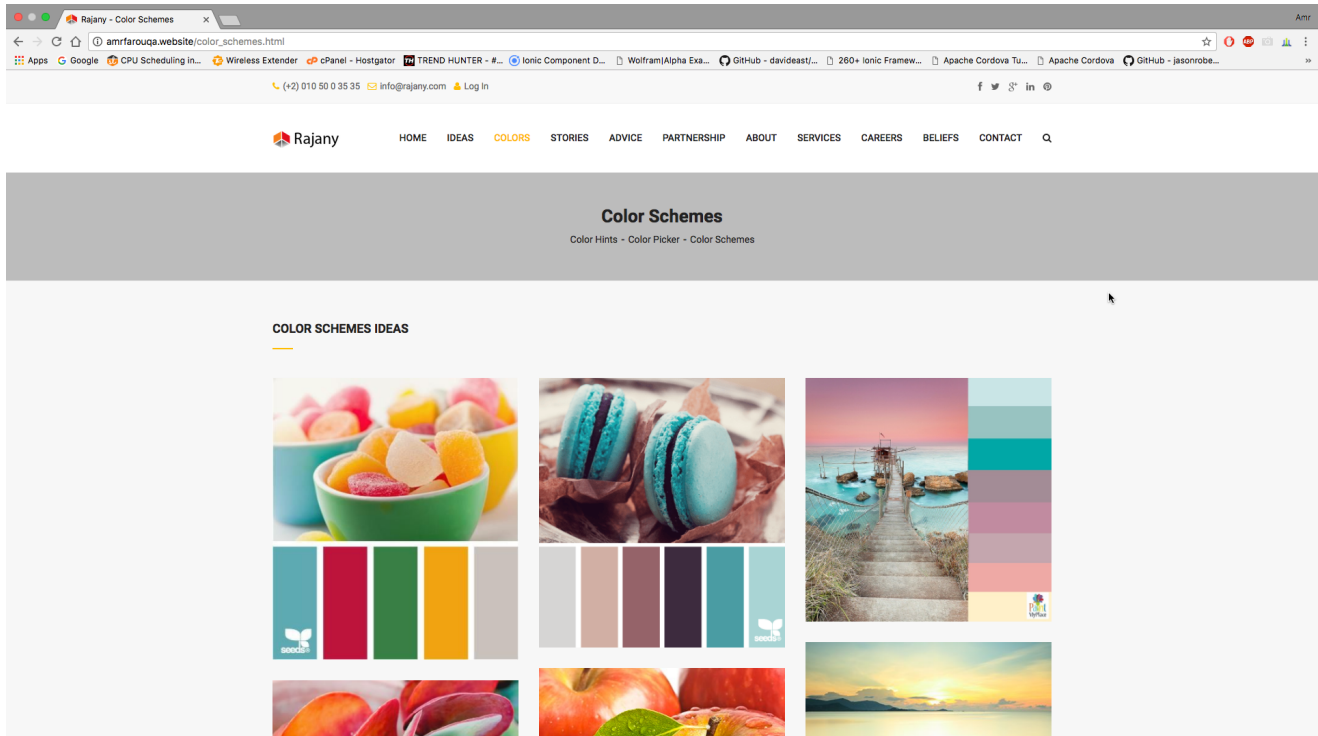
**BATHROOM**  
START BROWSING



**BEDROOM**  
START BROWSING

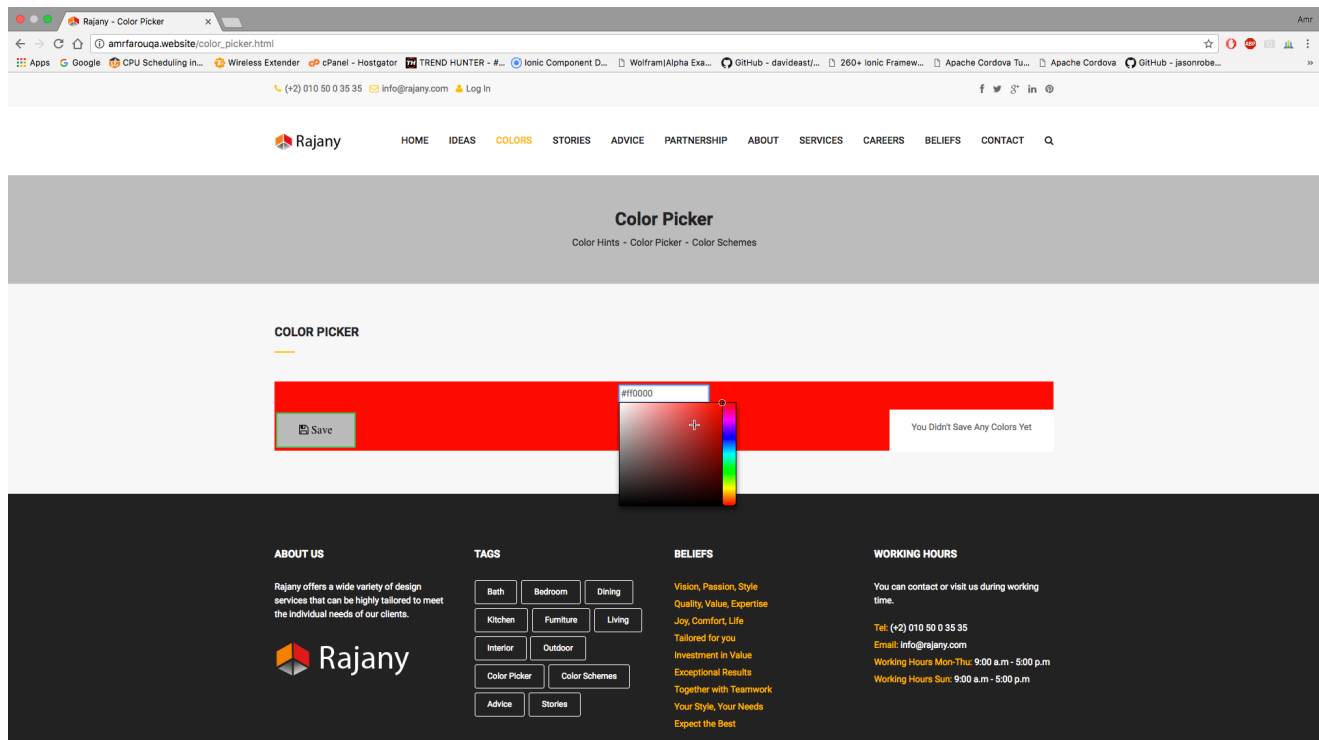


# COLOR SCHEME WEBSITE

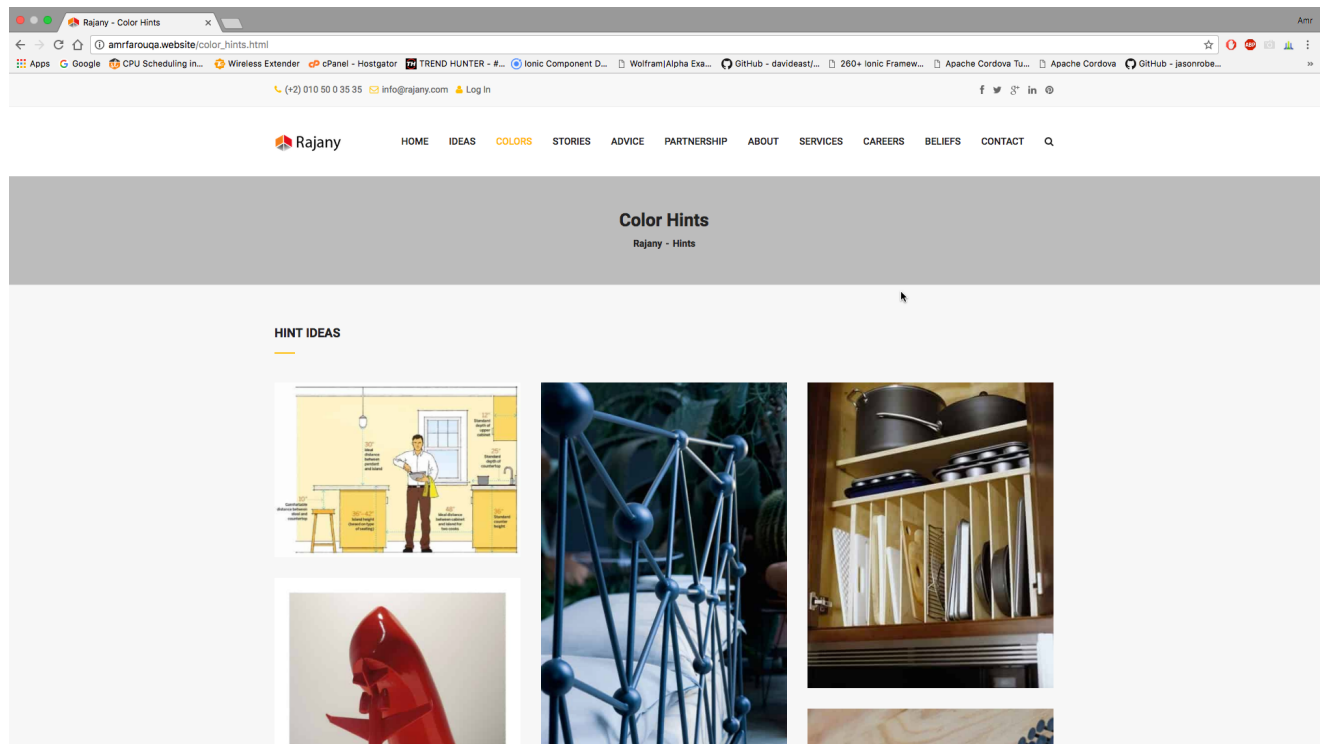




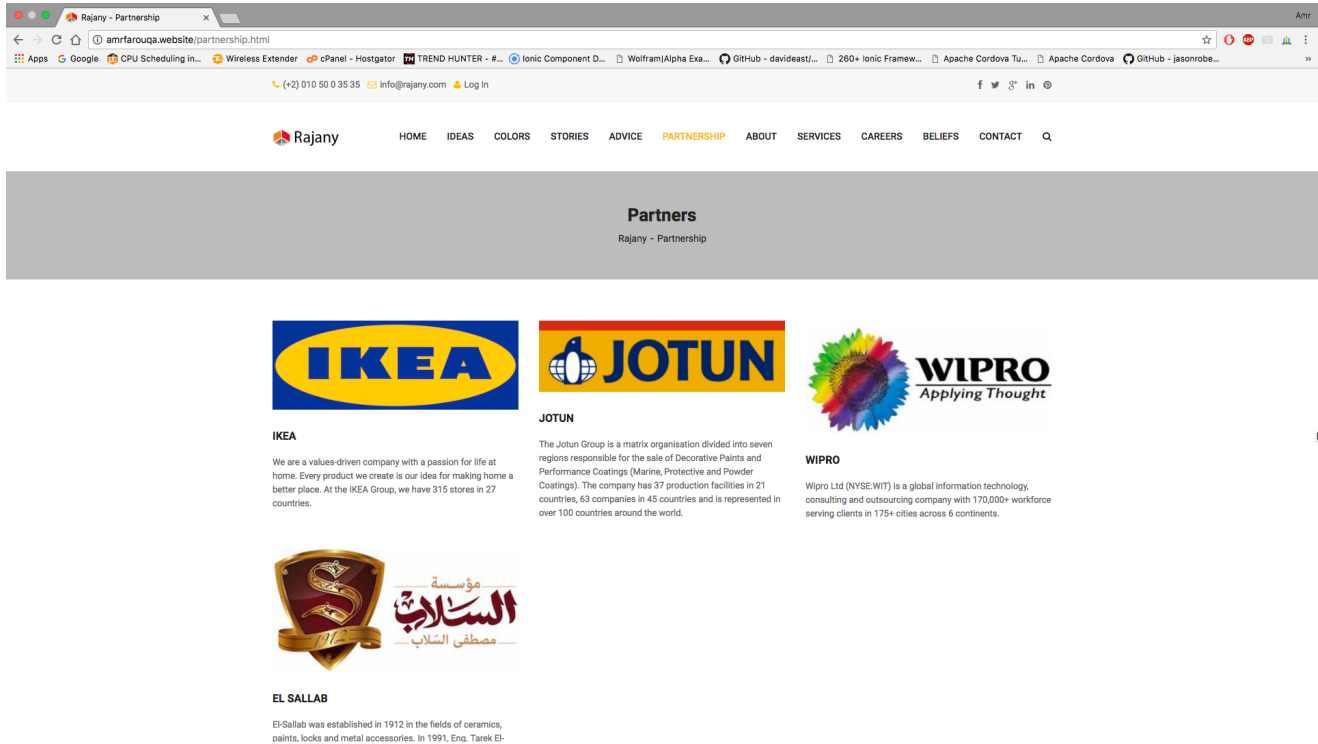
# COLOR PICKER WEBSITE



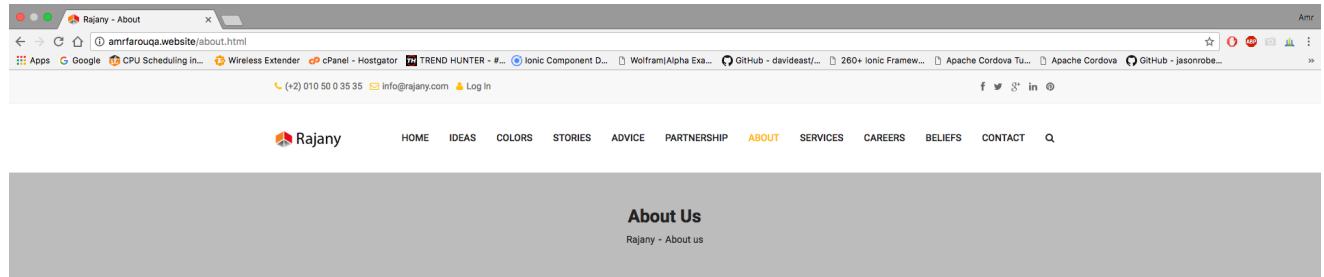
# COLOR HINTS WEBSITE



# PARTNERSHIP WEBSITE



# ABOUT WEBSITE



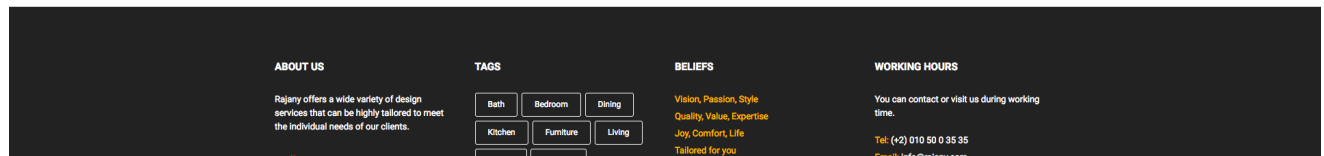
## WHO WE ARE & WHAT WE DO

An accomplished architect & interior designer for over 15 years. **Ayman Ferjany**, is owner and principal of Rajany, an experienced and specialized design firm located in Cairo, Egypt. His diverse design experience includes various commercial and residential projects. His commercial work encompasses club and amenity centers, restaurants, automobile showrooms and corporate offices, while his residential work includes custom and model homes, from new construction to remodeling design.

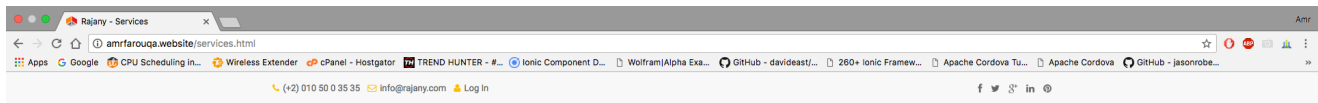
**Ayman** opened his first design firm in 1997. Over the past 15 years, he has led the vision and goals for Rajany and the firm has flourished into one of the respected and diverse design firms.

Our staff includes a talented, educated and experienced design team with over 15 years of combined design experience. Our designers participate regularly in continuing education classes and frequently attend professional trade shows and design conferences to bring current design trends, technology and best business practices to our clients.

Our administrative support staff works closely with the design team to provide our clients a professionally managed and highly detailed process.



# SERVICES WEBSITE



HOME IDEAS COLORS STORIES ADVICE PARTNERSHIP ABOUT **SERVICES** CAREERS BELIEFS CONTACT Q

## Services

Rajany - Services



### CLIENT MEETING AND PROJECT INTERVIEW

Allows you – the client – to review our firm's work, our design philosophy and our ability to direct and lead the design you desire for your project.



### DESIGN PROGRAMMING

Is an essential step in the design process that allows you and the design team to fully examine and discover all wishes, tastes, likes and dislikes, which will help direct the initial design development of your project.

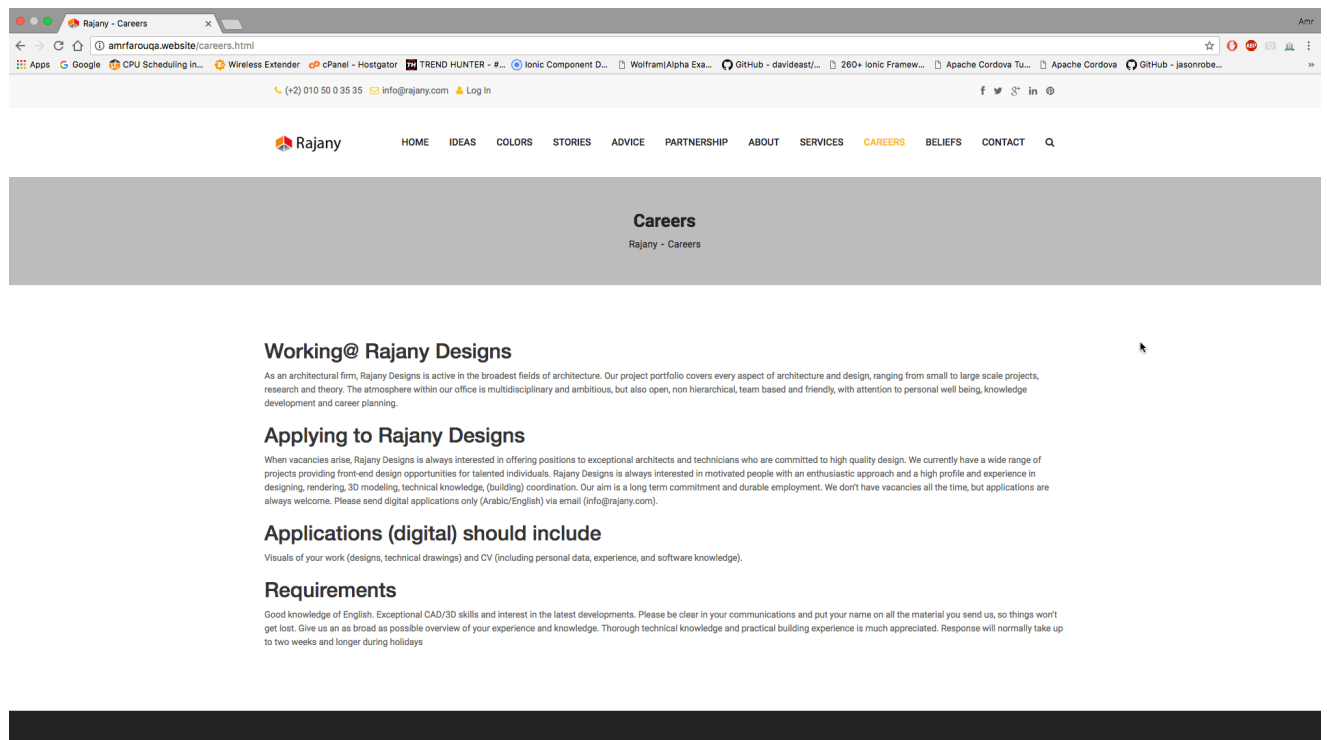


### DOCUMENTATION

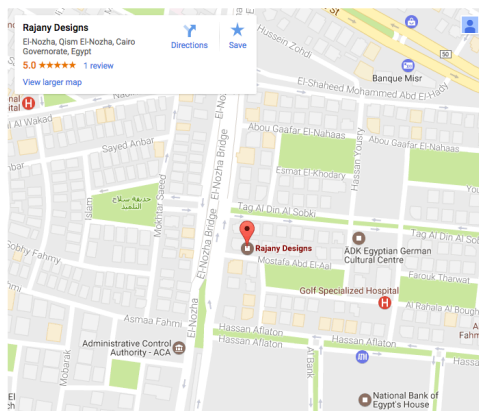
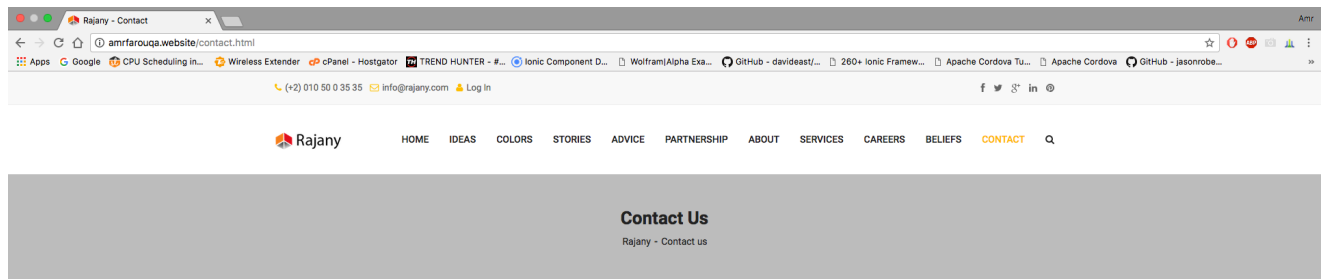
Is consists of detailed measurements, photography and information gathering for your project.



# CAREERS WEBSITE



# CONTACT WEBSITE



## CONTACT INFO

You can contact or visit us in our office from Sunday to Thursday from 9:00 a.m - 5:00 p.m

📍 9 El Nozha ST, Heliopolis, Cairo, Egypt

☎ (+202) 22 91 54 60  
(+202) 24 18 88 12

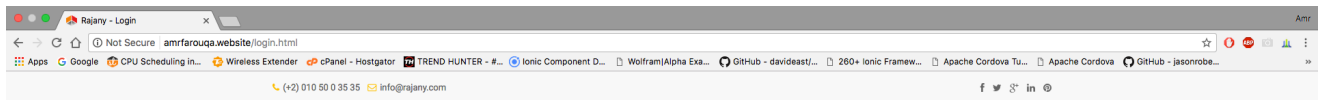
☎ (+2) 010 50 0 35 35  
(+2) 019 38 3 11 11

✉ info@rajany.com

## SEND US A MESSAGE

Name	<input type="text"/>
Email	<input type="text"/>
Message	<input type="text"/>

# LOGIN METHODS WEBSITE



HOME IDEAS COLORS STORIES ADVICE PARTNERSHIP ABOUT SERVICES CAREERS BELIEFS CONTACT Q

## Login to Rajany

Rajany - Login

Sign Up

Log In

Sign Up for Free

First Name \*

Last Name \*

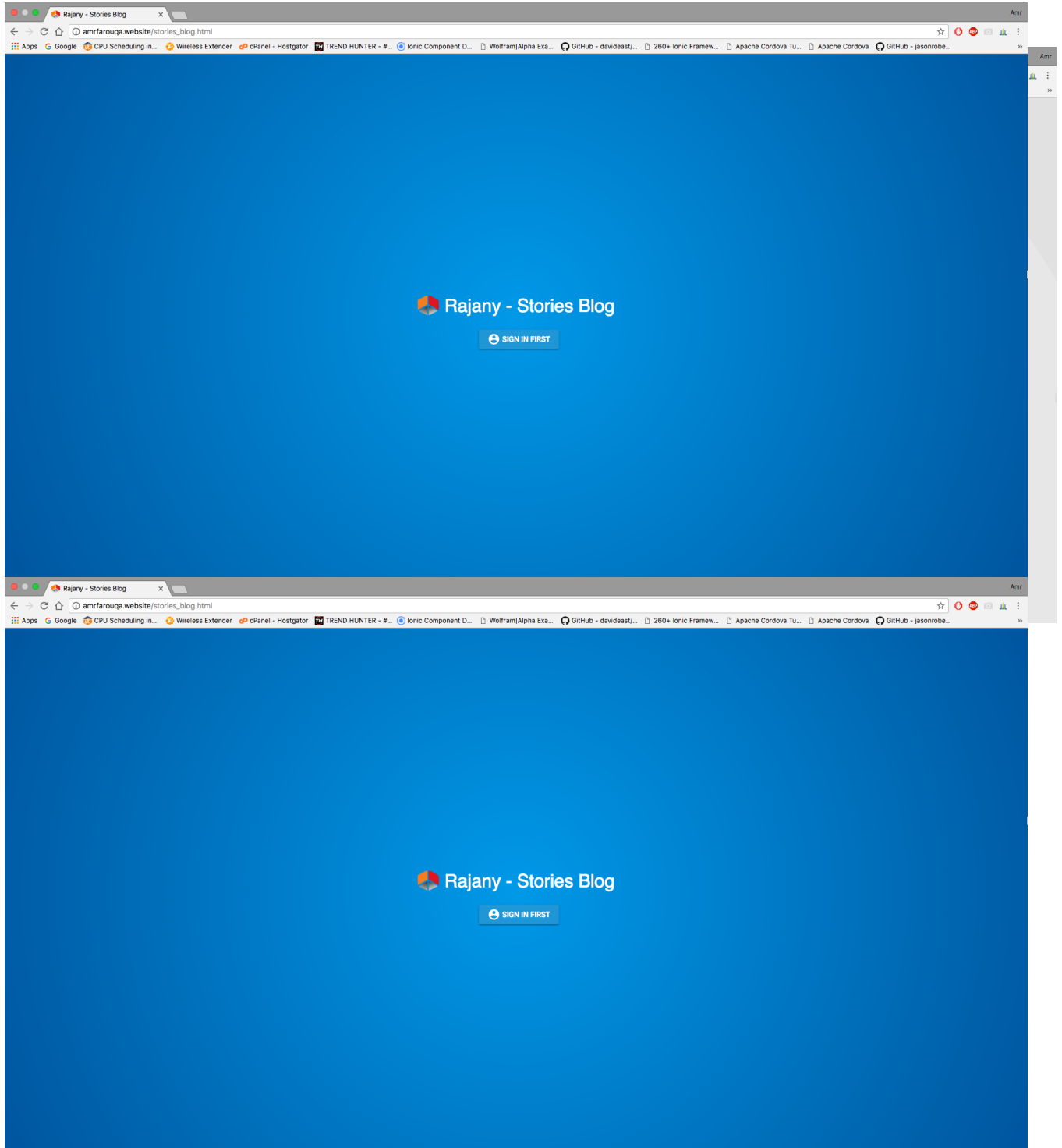
Email Address \*

Set A Password \*

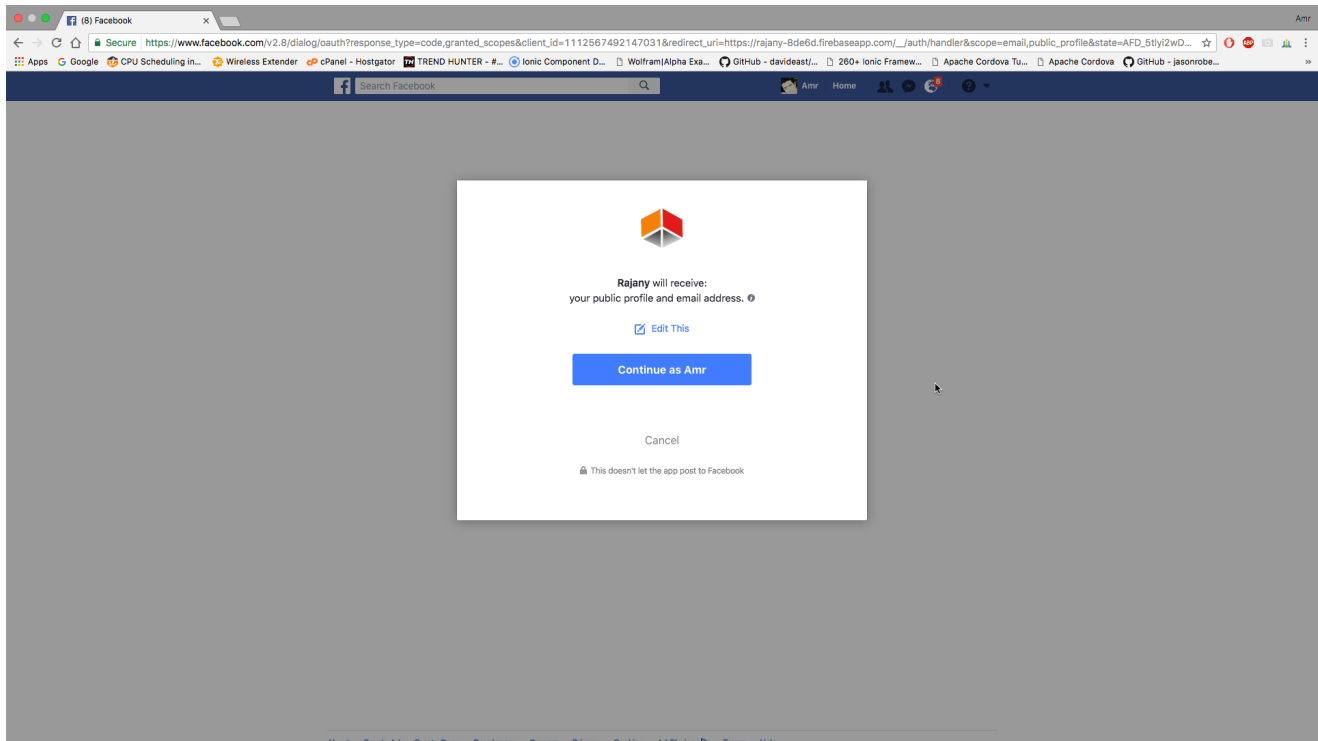
SIGN UP



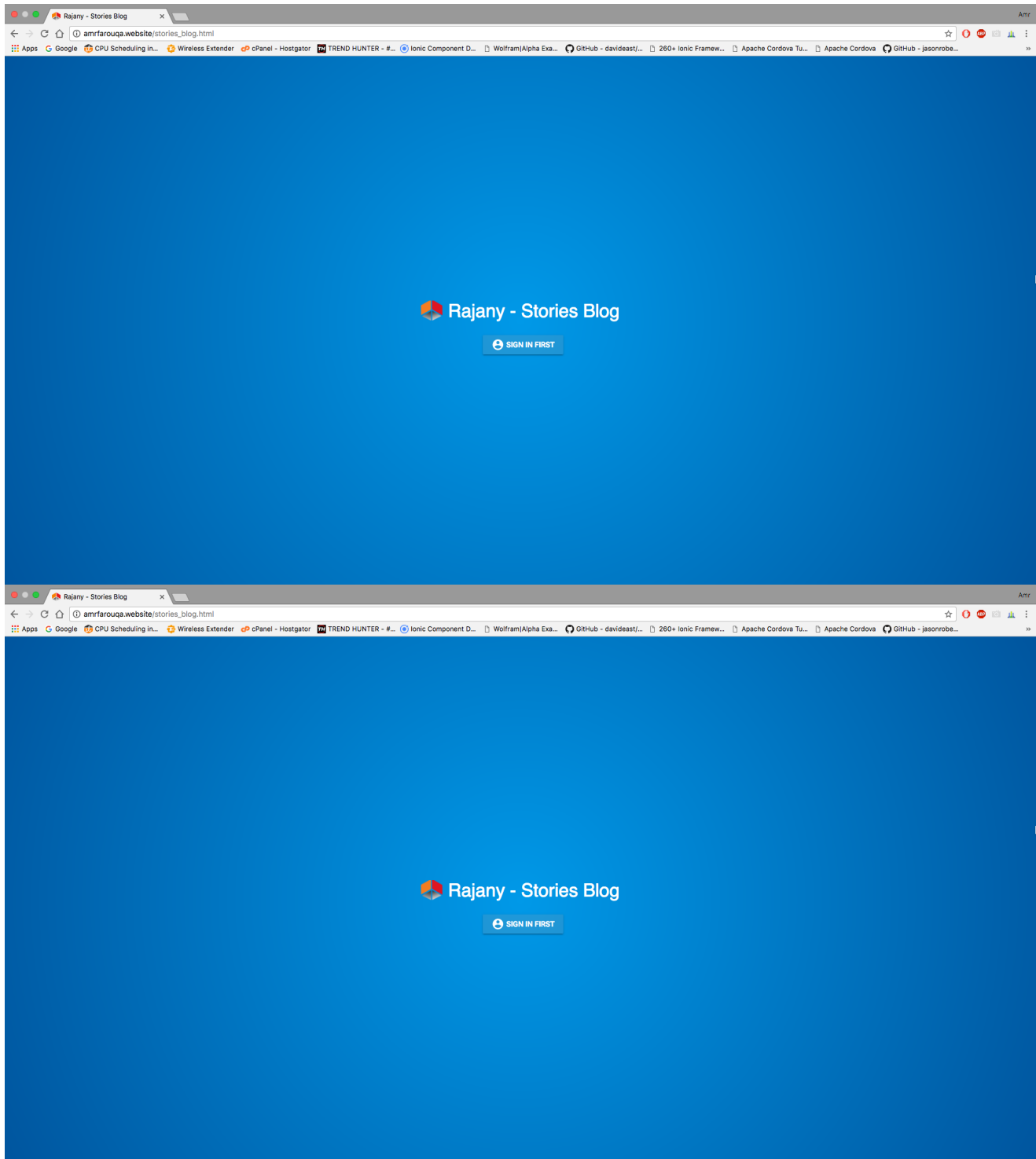
# GOOGLE LOGIN WEBSITE



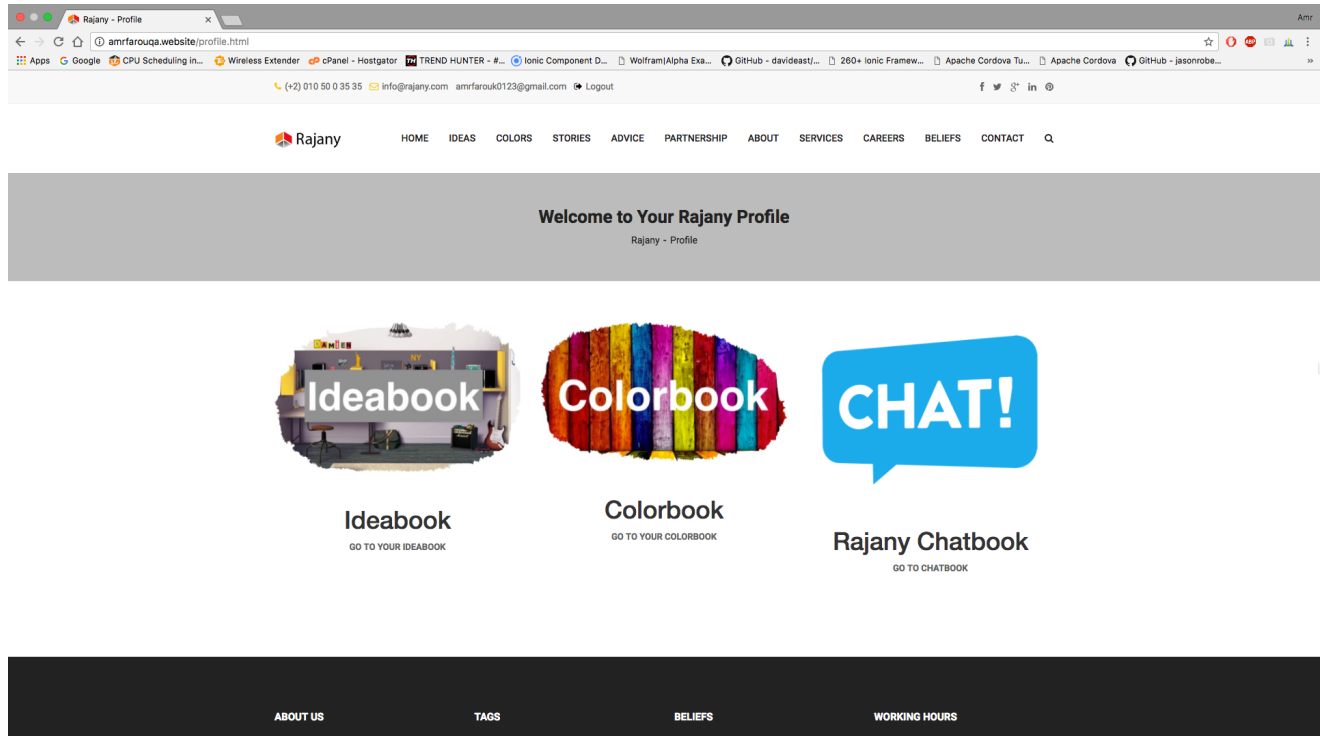
# FACEBOOK LOGIN WEBSITE



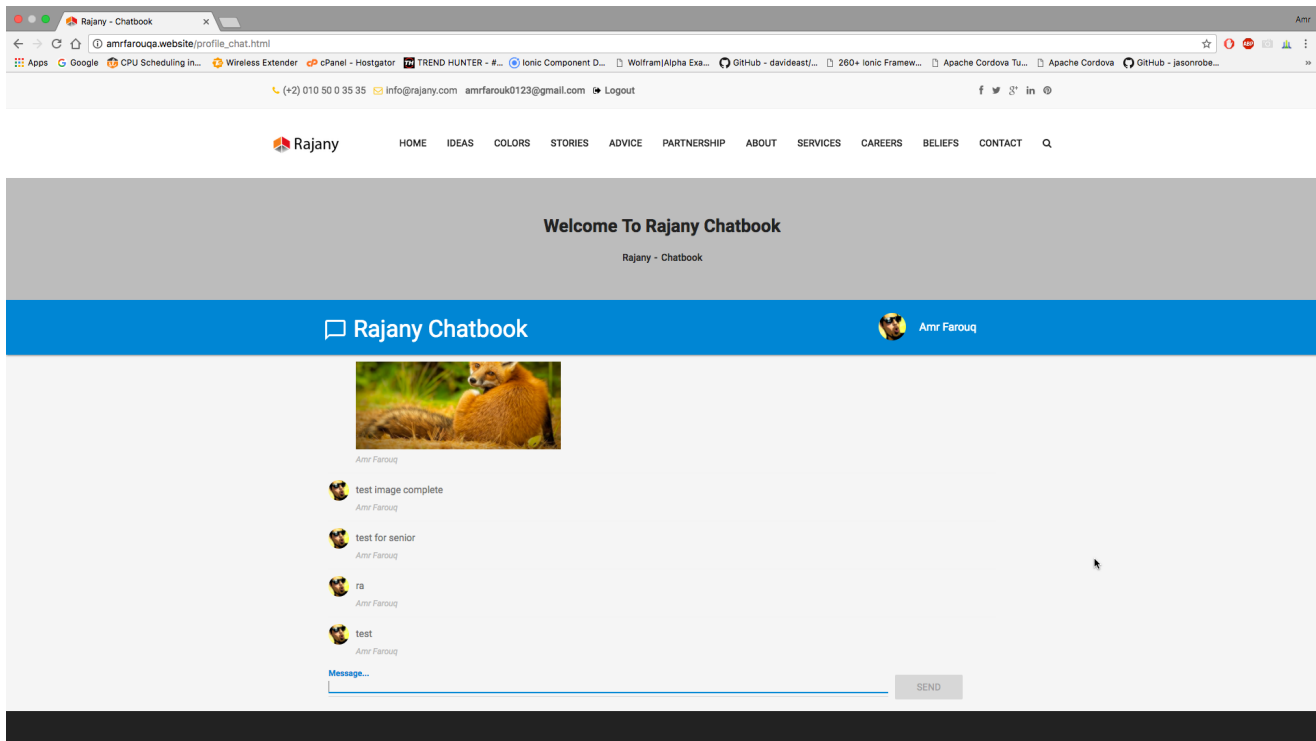
# ADVICE AND STORIES BEFORE LOGIN WEBSITE



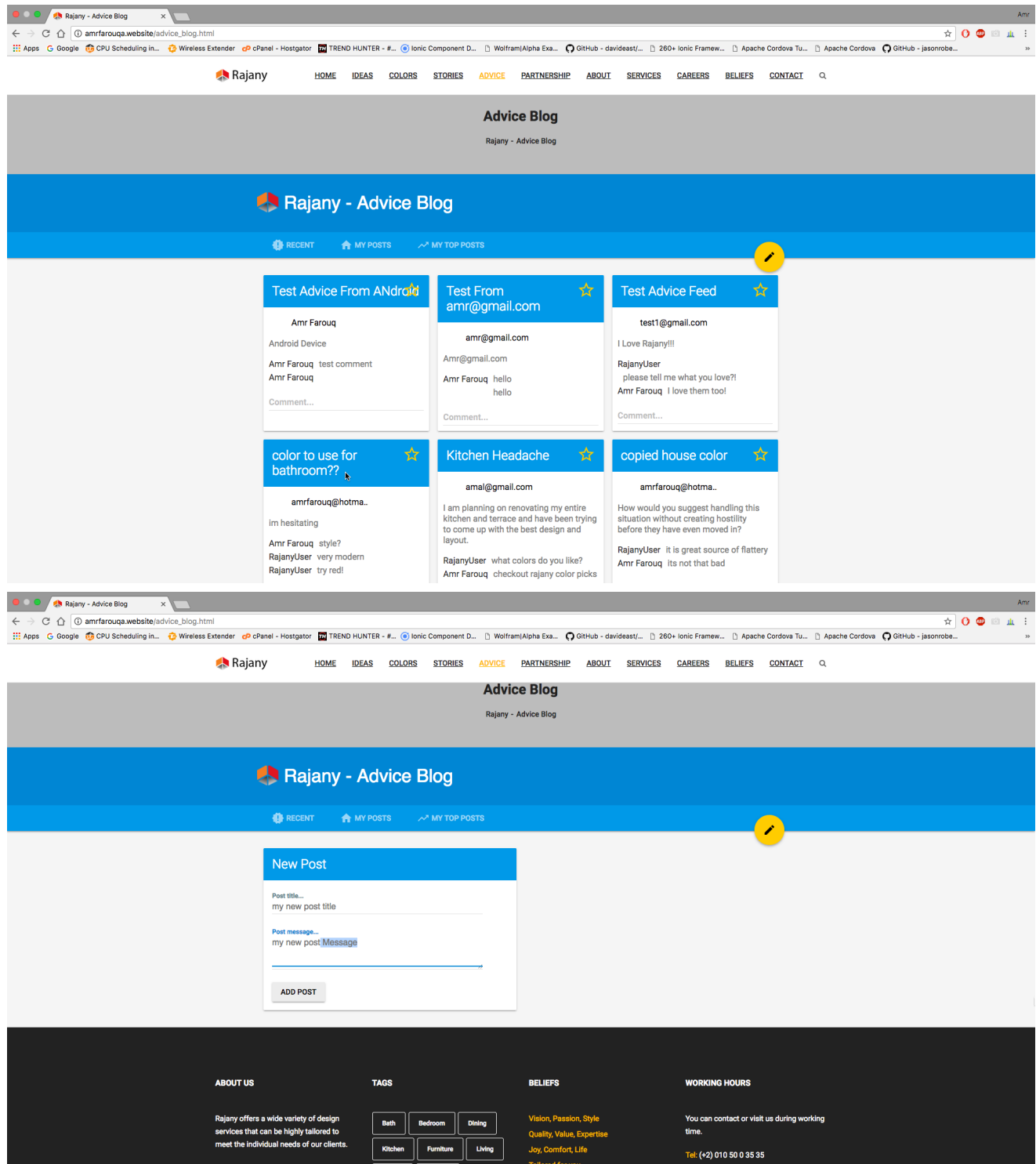
# USER PROFILE WEBSITE



# CHATBOOK WEBSITE



# ADVICE WEBSITE



# STORIES WEBSITE

