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Demos!

CREATING MOBILE APPLICATION FROM SCRATCH



Kyle D'Souza, July 2021
& My Amazing Students :)

tump
CENTER FOR CREATIVE TECHNOLOGIES

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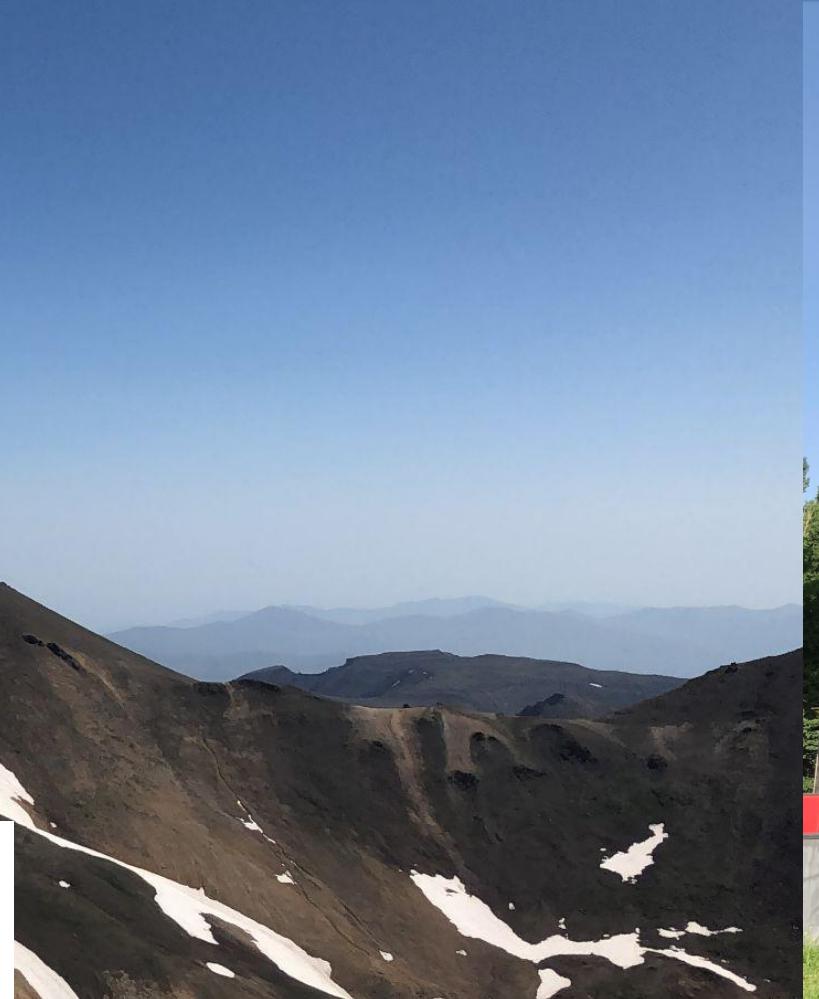
Who am I?

Kyle D'Souza

- Lecturer and Graduate Researcher at Stanford
- Background: Computer Science (AI, Design, Security)
- Past: Microsoft, Cloudflare, Startups
- Future: Working as a Product Manager at Microsoft



Ես սիրում եմ Հայաստանը



Introduction



Lab Description

- 2 Week Lab
- Build a mobile application from nothing
- First 4 Days: Learn React Native
 - Build a Profile
- The Rest: Design and Build a Product that helps real customers
- Students work ethic: 110%



The programmers of tomorrow are
the wizards of the future. You're
going to look like you have magic
powers compared to everybody
else.

— Gabe Newell —

Goal

BECOME the magician :)

INSPIRE to create and put their dreams into reality

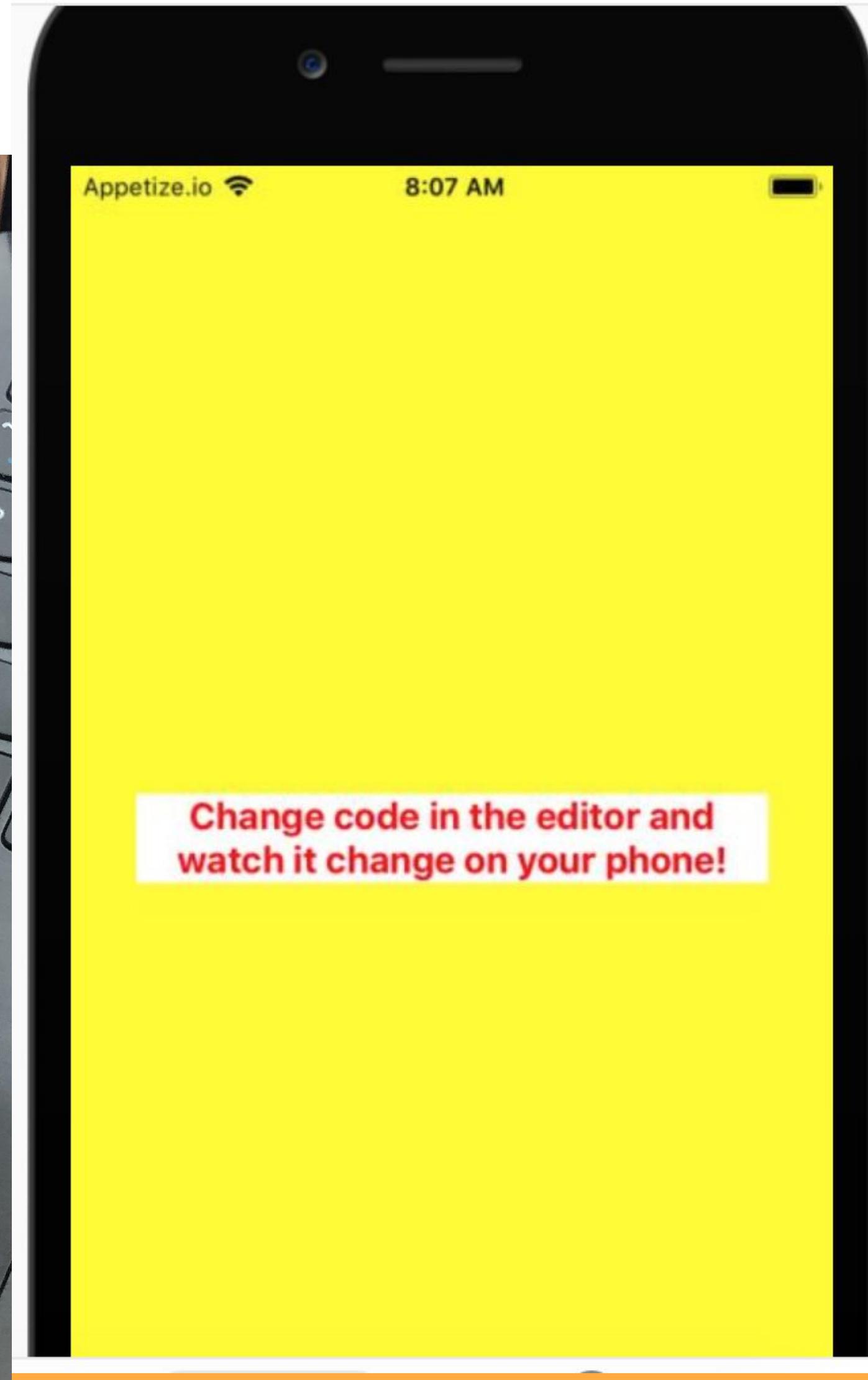
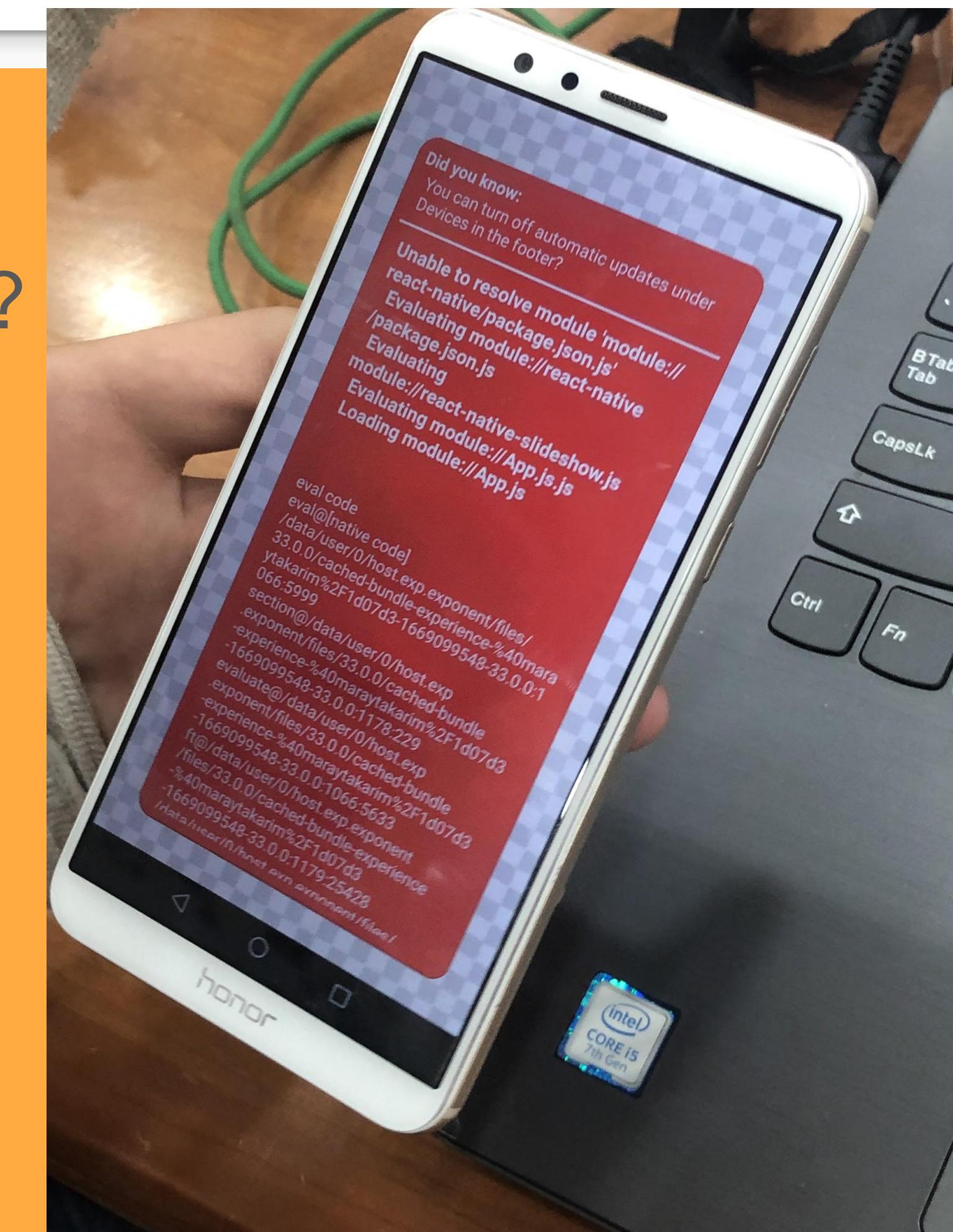
UNDERSTAND how to build a product prototype like real industry companies and startups

COMMUNICATE that vision to a broader audience

AND Have Fun and Work Hard!

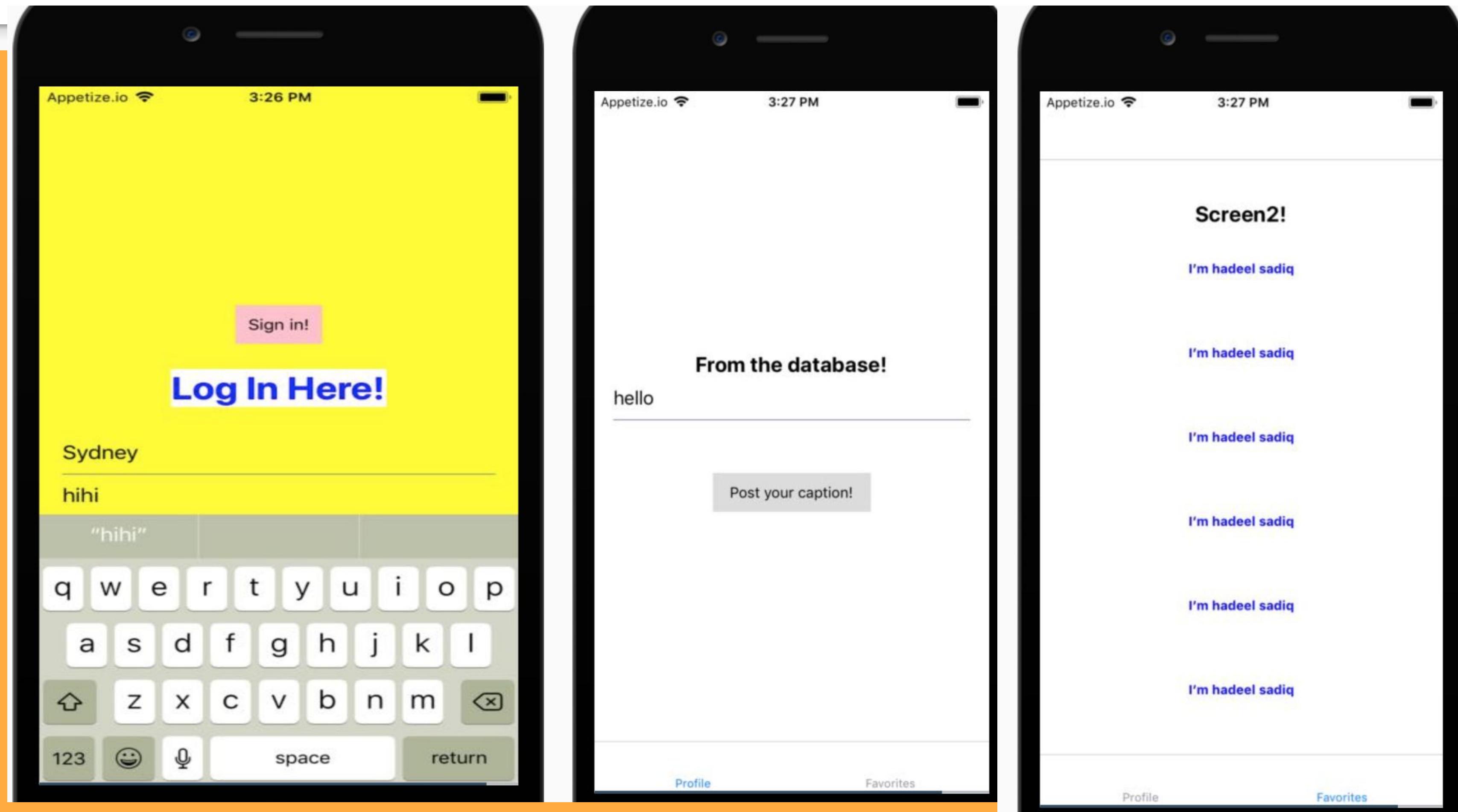
We went from here...

- What is React Native?
- How to get Text on screens?
- How do containers work?
- What are components?
- How to fix bugs?

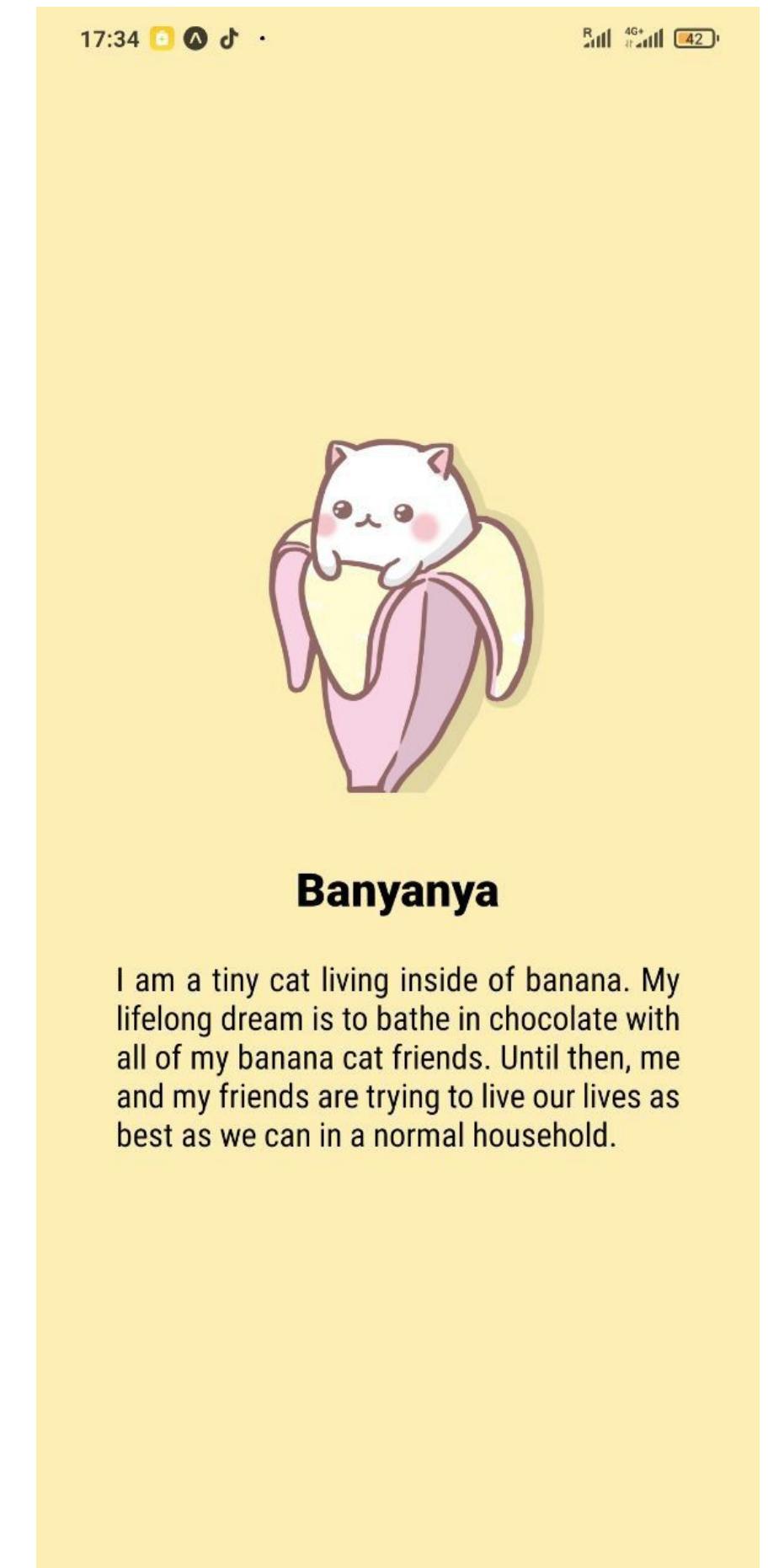


To here...

- State and Logins
- Databases
- FlatLists



Home Screens



Hello! Welcome to



Banyanya

I am a tiny cat living inside of banana. My lifelong dream is to bathe in chocolate with all of my banana cat friends. Until then, me and my friends are trying to live our lives as best as we can in a normal household.

GET STARTED!

Recap: What Students Learned

- Screen Components
 - View, ScrollView, WebView, Text, Image, TextInput, TouchableOpacity, Button, Camera Roll, FlatList (this is a lot!)
- Buttons and State
- Functions
- Moving Data Between Screens
- Navigation
 - StackNavigation
 - TabNavigation
 - Switch Navigation
- Integrations
- Database (store and save persistent information on the cloud)

Recap: But They Also Learned This

- Debugging Skills
- React Native
- Googling
- Front-end Development
- Databases/Back End
- Teamwork
- Problem-Solving
- English Practice!
- Work Ethic
- Resilience
- Friendship
- Different Types of Music ;)
- Programming Maturity
- Design Thinking
- Wireframing
- Designing Creative Solutions!
- And built a family <3

Product Design and Ethics

- Focused on the **MVP - Minimum Viable Product**
- **Artful Design - how do we design responsibly?**
- **Startup Mindset - Building a Vision to Gain Support**
- **3 Designs: Education, Enterprise Technology, Digital Literacy**

Prototype Demos

Easy Armenian





Easy Armenian

Kyle D'Souza
Nareh Abrahamyan
Naira Apikyan
David Grigoryan
Vladimir Hovakimyan
Martin Hovhannisyan

Hi Everyone!!

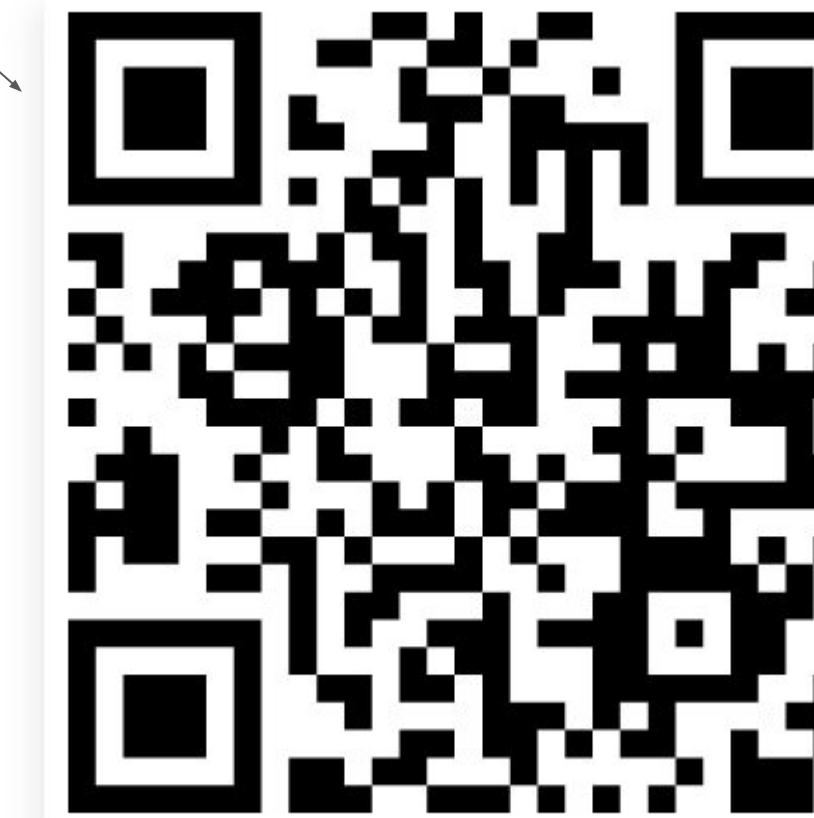
We are the Easy Armenian team. The purpose of this application is to make it easier to learn Armenian.

FOR ANDROID USERS



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FOR IOS USERS



What problem have we solved?

For who and why?

Problem statement

Armenian is one of the hardest languages in the world. It takes 2-3 hours per day to learn basic Armenian. So there was a need of something which could make it easier to learn Armenian for people who want to learn it.



EASY ARMENIAN



So we built the Easy Armenian. The application can be used by every single person who knows English and wants to learn Armenian. And it will take approximately 15-30 minutes per day.

What are our application's main features



The Easy Armenian contains images, so the learners can remember the words with their meanings & translations visually.

Nature Բնություն

A cat Կատու (katu)



Cloud Ամպ (Amp)

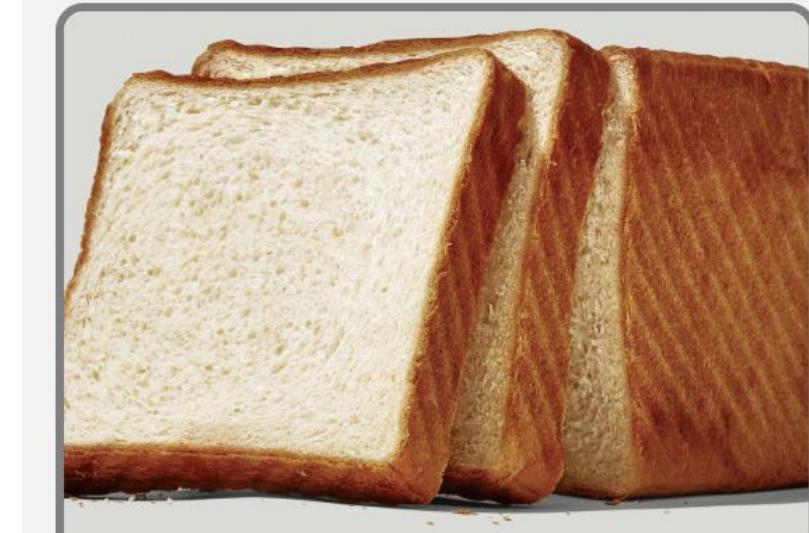


Tree Ծառ (Tsarr)



Food Սննդն

Bread հաց (hats)



Water ջուր (jur)

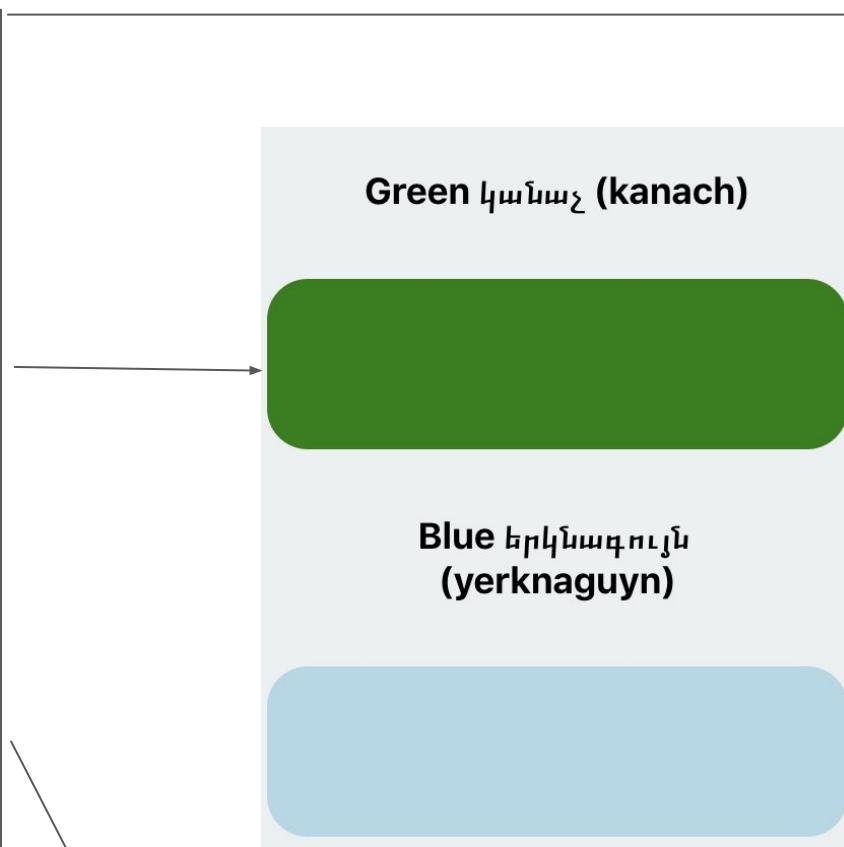
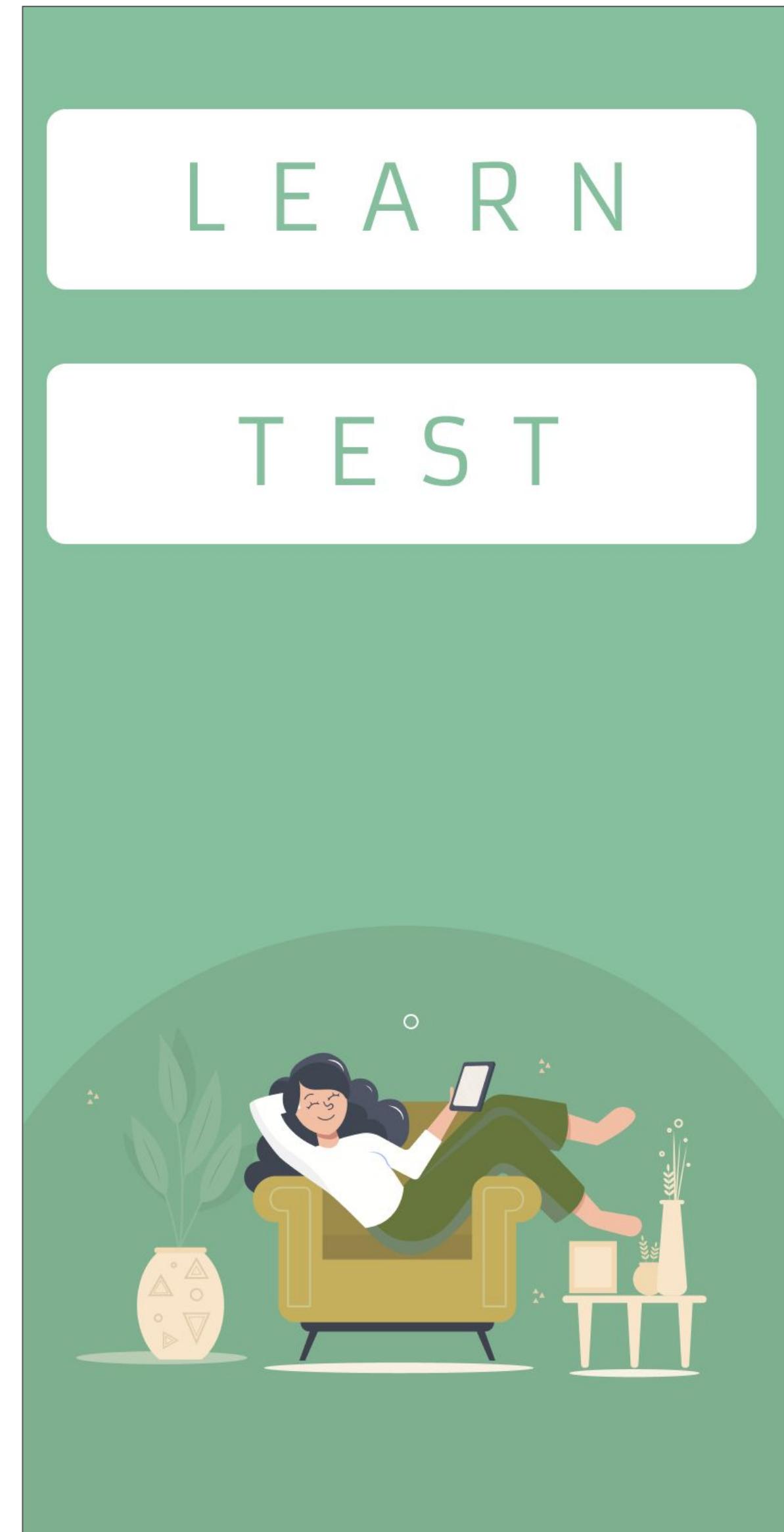


An egg ձիւ (dzu)

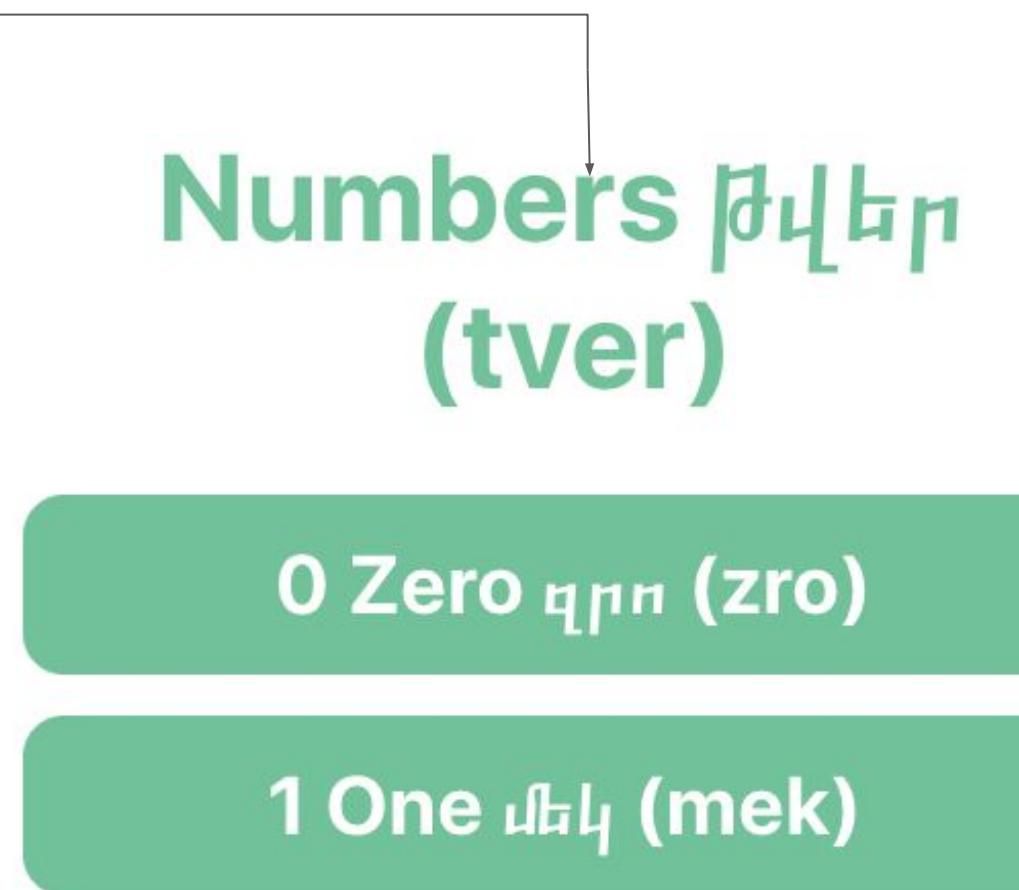


As you will see in the video the users can pass tests and the lessons several times in order to gain a comprehensive knowledge of the language.

Now a little tour through our application...



ամպ

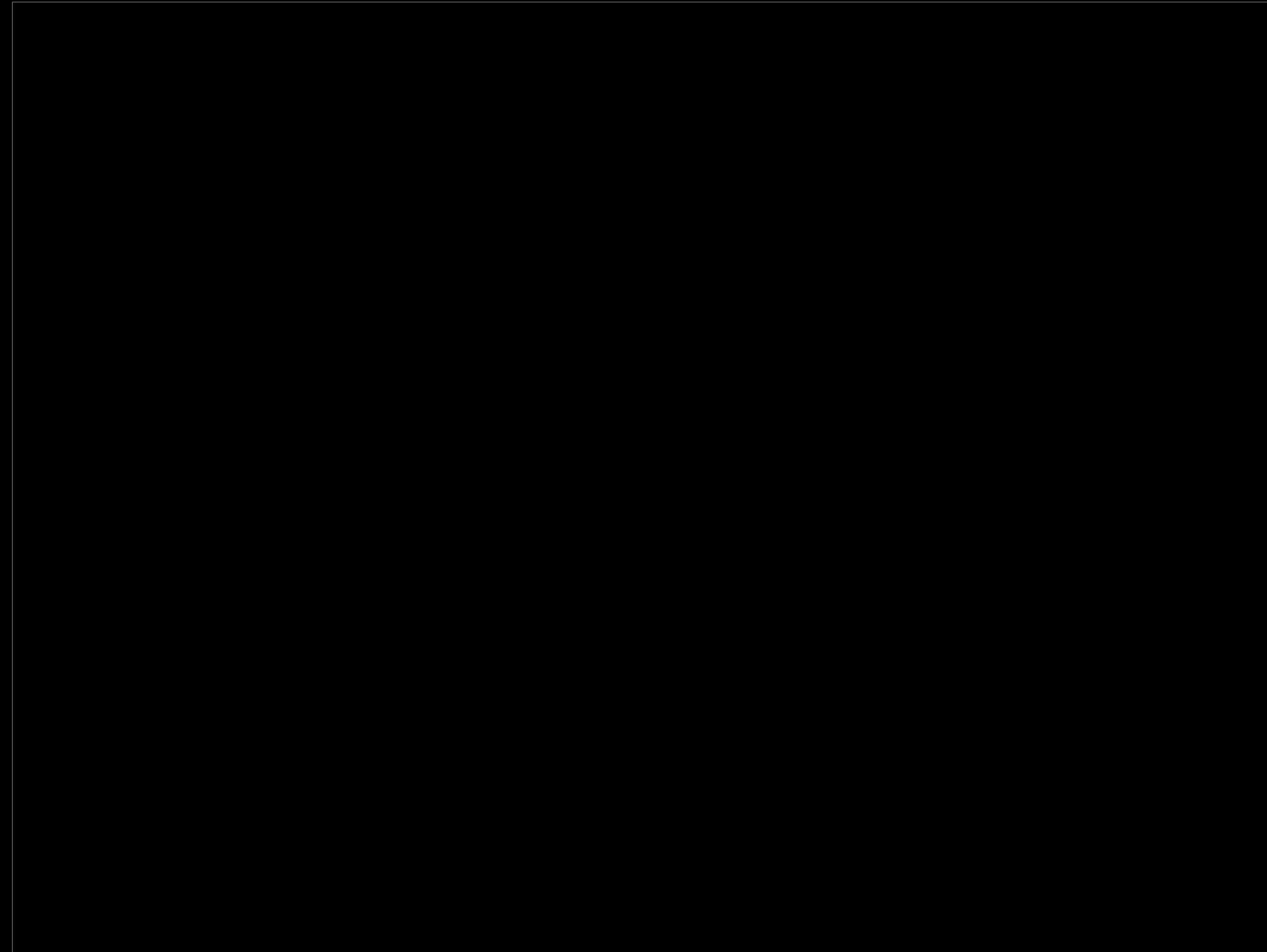


ամպ



next

Now let's watch the whole application together !!!





This is our lovely team !

Let's get acquainted with the members and to know more about who was responsible for what.



David Grigoryan
Databases

Դավիթ Գրիգորյան



Nareh Abrahamyan
Նարե Աբրահամյան
Organiser, lead developer



Vladimir Hovakimyan
Designer, especially Logo

Վլադիմիր Հովհակիմյան



Naira Apikyan
Նարա Ապիկյան
*Lead developer
and bug fixer*



Martin Hovhannisyan
UI Design

Մարտին Հովհաննիսյան

Thanks for watching !!!!

And a special thanks to Kyle <3

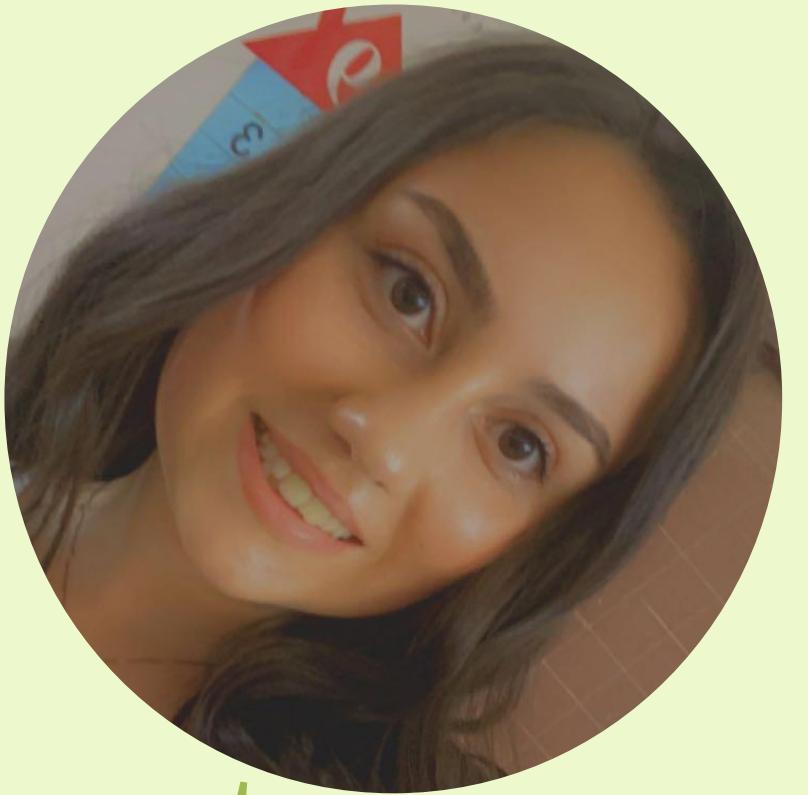
Salata



Salata App



Meet Our Team



Mary



Marie



Anna



Gevorg



Melanie



Hagop

What is Salata?

Salata is a mobile application for restaurants and chefs to effectively receive and prepare orders from customers.



What are our benefits?

01

First

It has a digital menu, so you can find more about our dishes by checking out our app

03

Third section

We allow restaurants to efficiently store and track their customers' orders

02

Second section

Our app also has a order placement, so it will take a minute to order something from our app

04

Fourth section

Our app allows chefs to play the recording of the orders

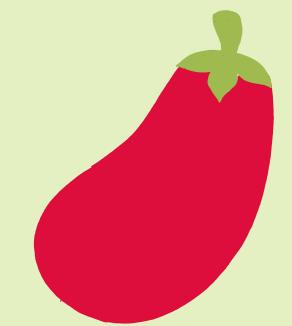
Who are our target users?



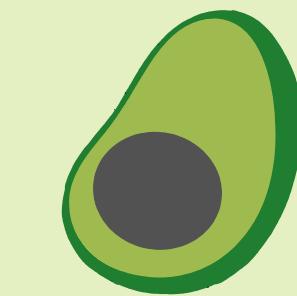
People
who don't
have time
for
cooking



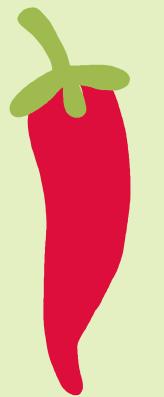
People
who are
hungry



People
who live in
the US

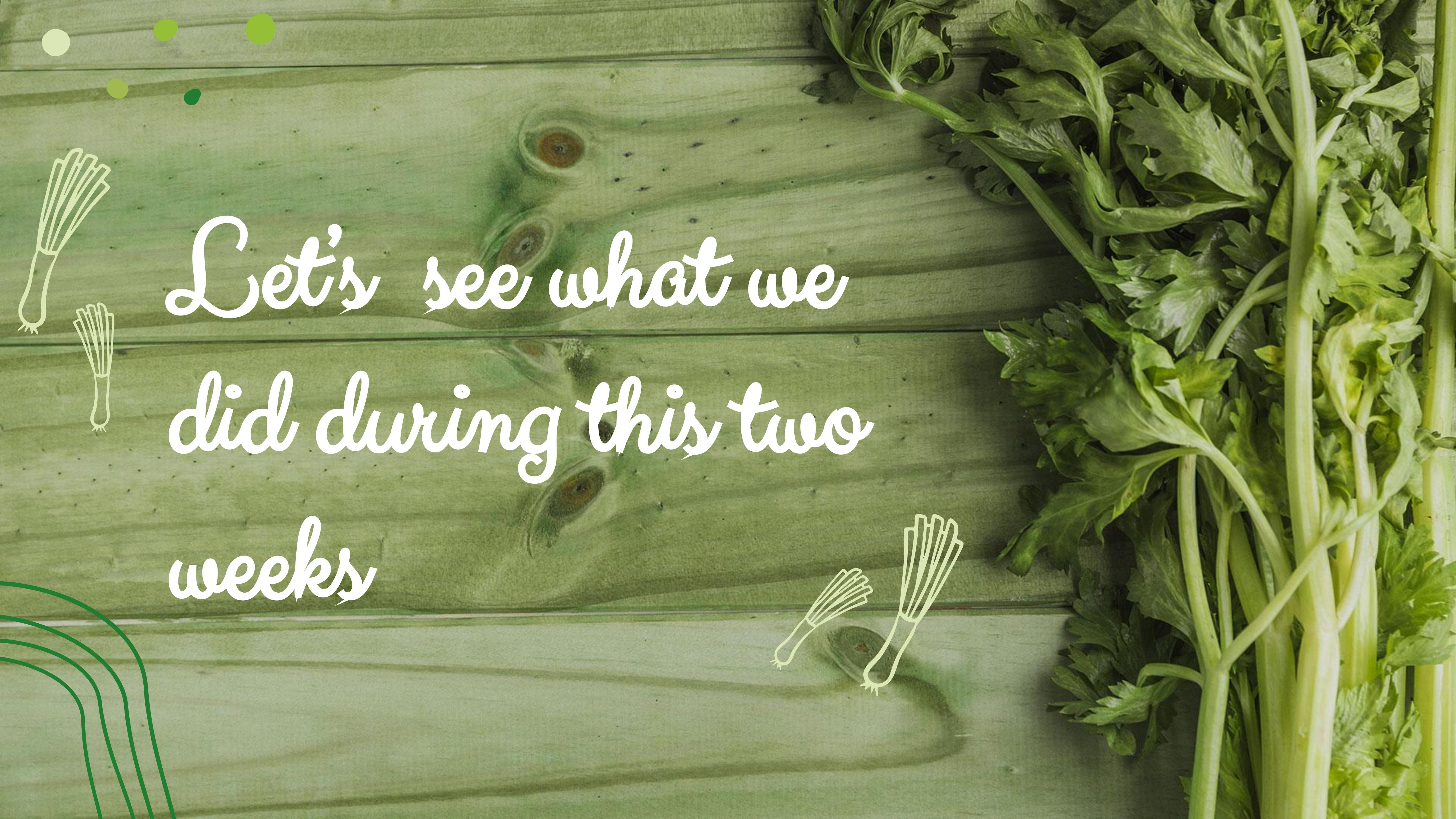


People
who don't
know how
to cook

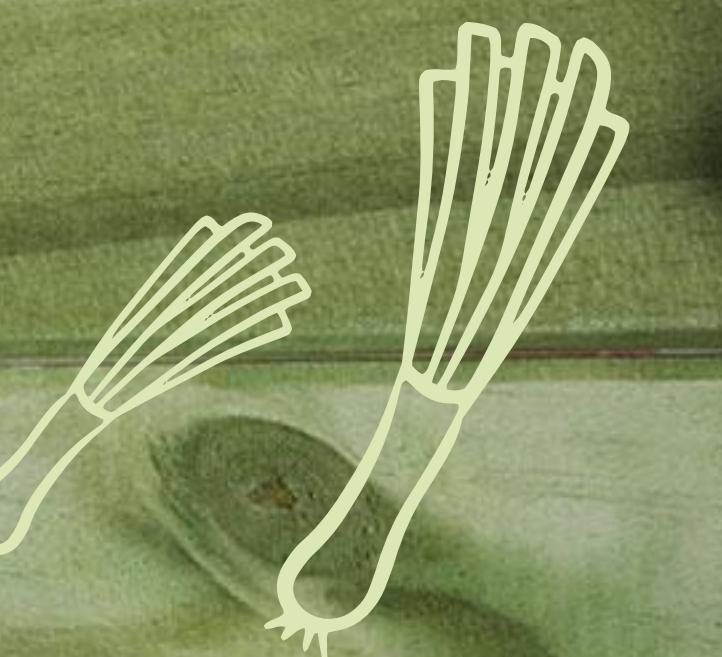


People
who are
tired of
cooking





Let's see what we
did during this two
weeks



First Week

During first week,
we learnt about
React native and
got some basic
skills that helped
us develop our
own app.

```
function HomePage({ navigation }) {
  return (
    <View style={styles.container}>
      <View style={styles.header}>
        <Image style={styles.logo} source={require('../assets/logo.png')} />
      </View>
      <View style={styles.body}>
        <View style={styles.bodyImage}>
          <Image
            style={styles.salat}
            source={require('../assets/salatik.jpg')}
          />
        </View>
        <View style={styles.bodyButtons}>
          <TouchableOpacity
            style={styles.buttons}
            onPress={() => navigation.navigate('Photo')}
          > Upload Photo</Text>
        </TouchableOpacity>
          <TouchableOpacity
            style={styles.buttons}
            onPress={() => navigation.navigate('OrderScreen')}
          > Order Now! </Text>
        </TouchableOpacity>
        </View>
      </View>
    </View>
  );
}
```

The end of Second week



THANK YOU



Thank You Kyle for
these 2 amazing,
informative and funny
weeks.

Thanks!

Slides made by:

Mary Grigoryan

Marie Nazaryan

Anna Hovhannisyan

Gevorg Babajanyan

Melanie Melkonyan

Hagop Arslanian

Any Questions?

Digital Literacy



ՀԱՆՐԻՀԱԼՈՒԹԵՅՆՆ ՏՈ TUMO, COACHES, AND STUDENTS 🙏

