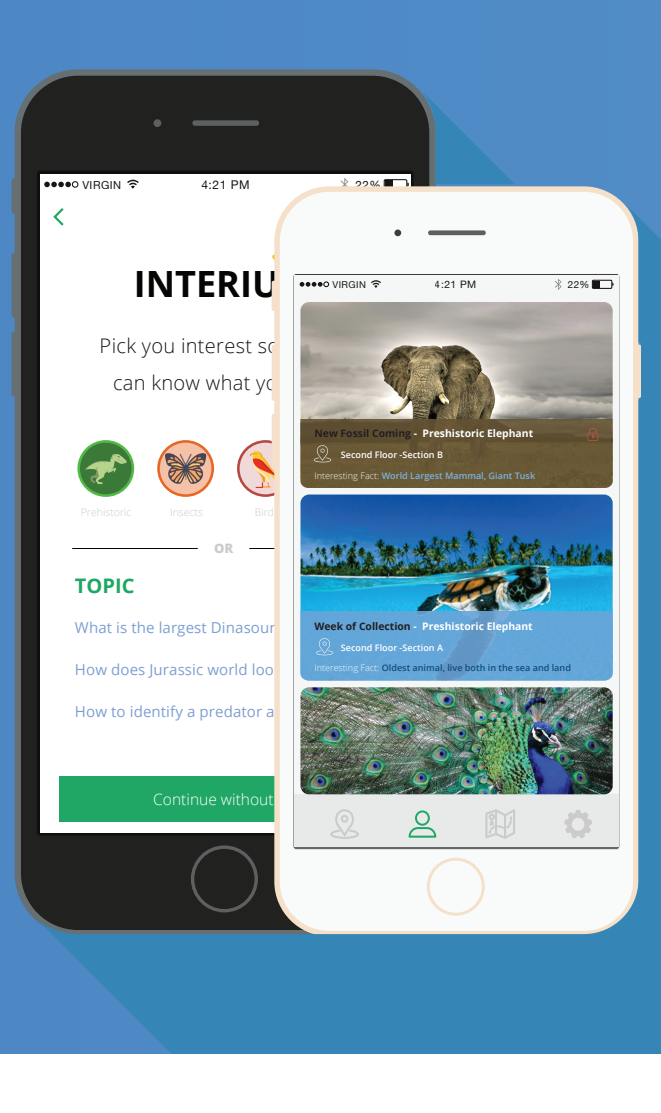
# Interium

A mobile application that incorporates gameful features into museum visiting experiences.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4:21 PM
INTERIU
Pick you interest so
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What is the largest Dinasour
How does Jurassic world loo
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Continue without
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Second Floor -Section B
Interesting Fact: World Largest Mammal, Giant Tusk
Week of Collection - Preshistoric Elephant
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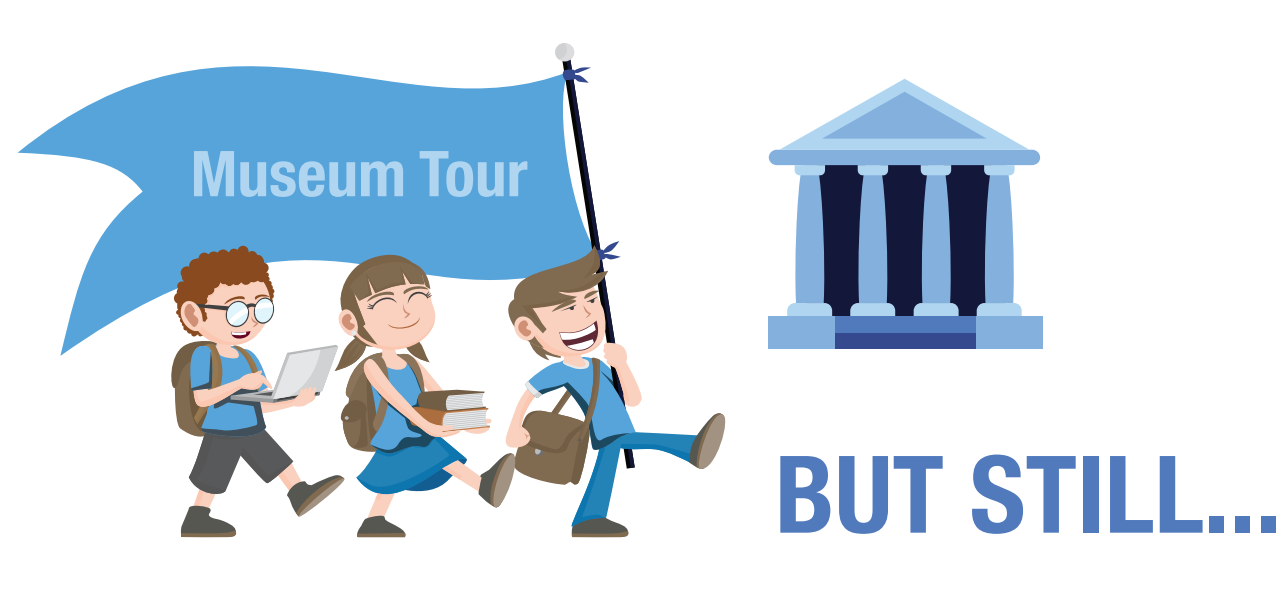
## Frame the Design Problem

**Interium is a mobile application for 3rd-6th grade students to enhance their engagements of visits to the U-M Museum of Natural History in Ann Arbor. The primary goal of Interium is to ensure our target audience gains as much knowledge, offered by the museum, as possible with use of our application.**

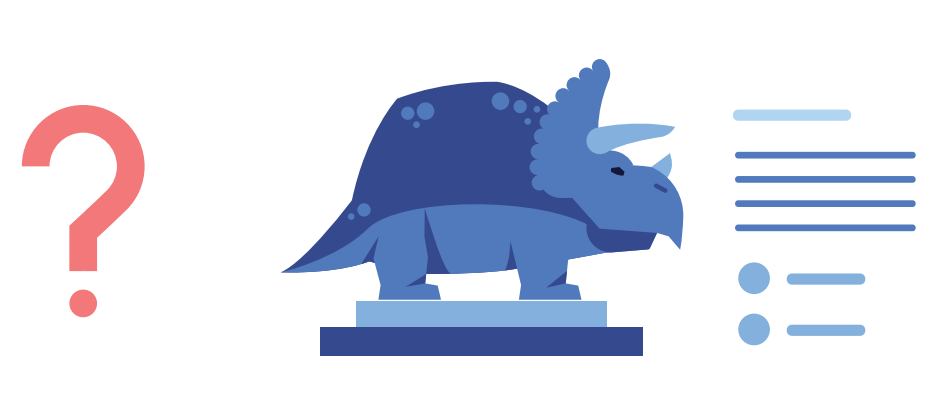
We visited the museum and conduct 5 interviews with museum staffs in the efforts to inquire and gauge the level of engagement children currently have at the museum. At this early desgin stage, we still put our target user as children generally, but later we switch to focus on a specific group: 3rd-6th grade students based on the analysis of the interview notes.

One of the design problem we found from the interview is that children always passively received the knowledge from museum tour and it is not interesting and fun for them in most of the time, The museum wants to have a more engaging and immersive solution to arouse children's initiatives and interest on museum visiting experience . we also find out that there is limited interactivity between the students and the museums. Plus, due to their young age and cognitive abilities, no method of education surpasses the potency of hands-on learning.

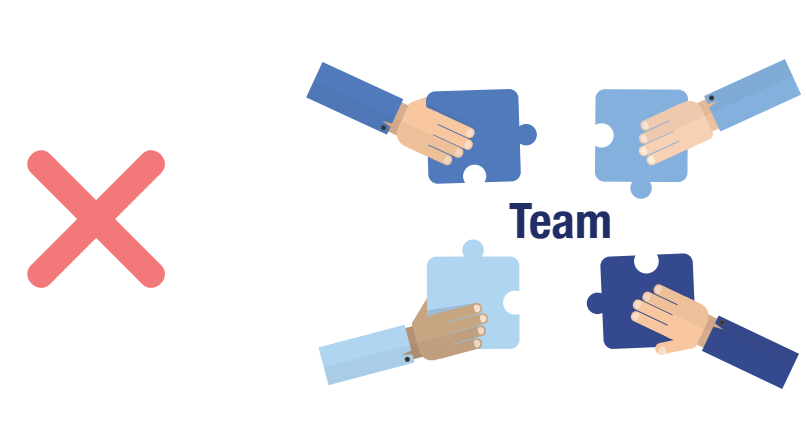
**Most Museums have a learning tour at the start**



**User's learning engagement is low and hard to find self-interested knowledge**



**User lacks of Interactivity with other students and museum.**



## Understand The Users

**After we set up with the design problem & goal, we are focusing on children within the 3rd-6th grades as our primary learner audience.**

We have found that children generally within this grade group are exposed to field trips to different types museums throughout their elementary school years according to our interview findings. Also, we believe that this group of children have adequate literacy and technology skills that enable them to use our application and learn with it.

We also need to consider our users even more carefully because the audience are learners. Therefore, team has created 2 personas from the research data to further explore the goals/needs, expectation, and diversity of the users, personas weren't just created and then forgotten. By using this UX tool through all design steps, it helps the team in these aspects:

- **Make every team member on the same page, to avoid any self-referential design.**
- **Validate the design decision and prioritize the app features by referring to personas.**

**Mike Smith**

2nd grade student

*I like to play with my friends, but museum is so boring!*

Fun Facts — Knowledge

Teamwork — individual

### Goal

- Learning the fun facts about museum and its exhibition artifacts.
- Have a good experience with his friends through their visit to museum.

### Motivation

Most of Mike's friends are science fans, despite he does not have particular interest into natural history museum, he would like to hanout with his friends in the museum. He could also show off his knowledge to his parents and teacher and get praise from them.

### Challenge

- The museum introductory tour is so boring to Mike.
- He would like to do more activities with his friends.
- The artifacts have too much information to learn.

**Tina Jones**

6th grade student

*Learning knowledge is always pleasant to me.*

Fun Facts — Knowledge

Teamwork — individual

### Goal

- Find the useful and interested piece of knowledge that is not covered in school.

### Motivation

Tina is a pretty good student in her class. She often get high score on science subject, she loves to discover more knowledge by herself after school and musuem is one of her favourite learning place. Therefore, every time Tina went to mesuem, she tried to obtain as much knowledge as she could find.

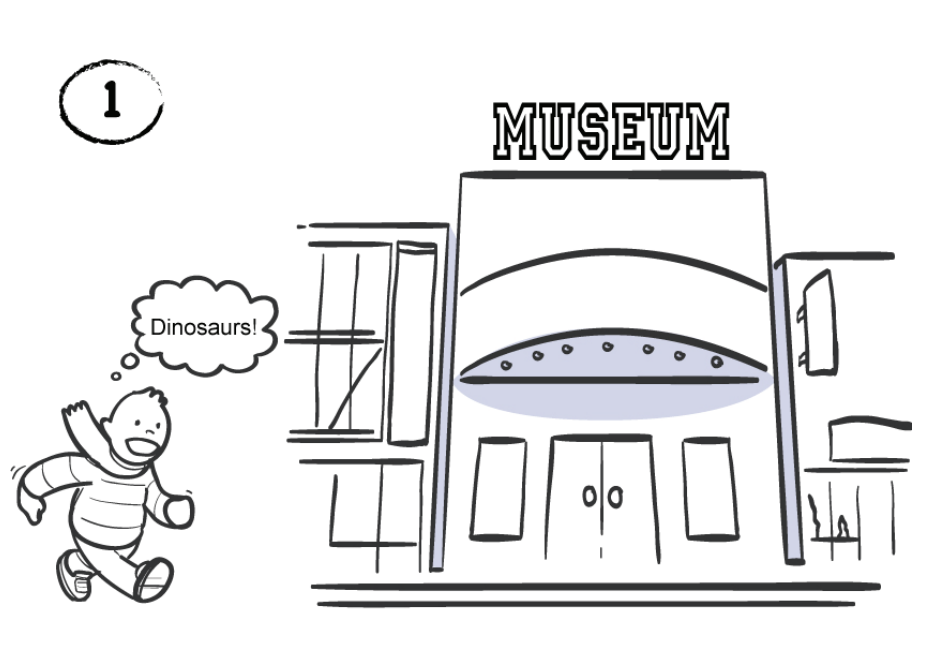
### Challenge

- To find her interested information is time-consuming.
- Some concepts on artifact's introducion is hard to understand.
- She has to walk back and forth regulary during the museum visit because lacking of a clear learning plan.

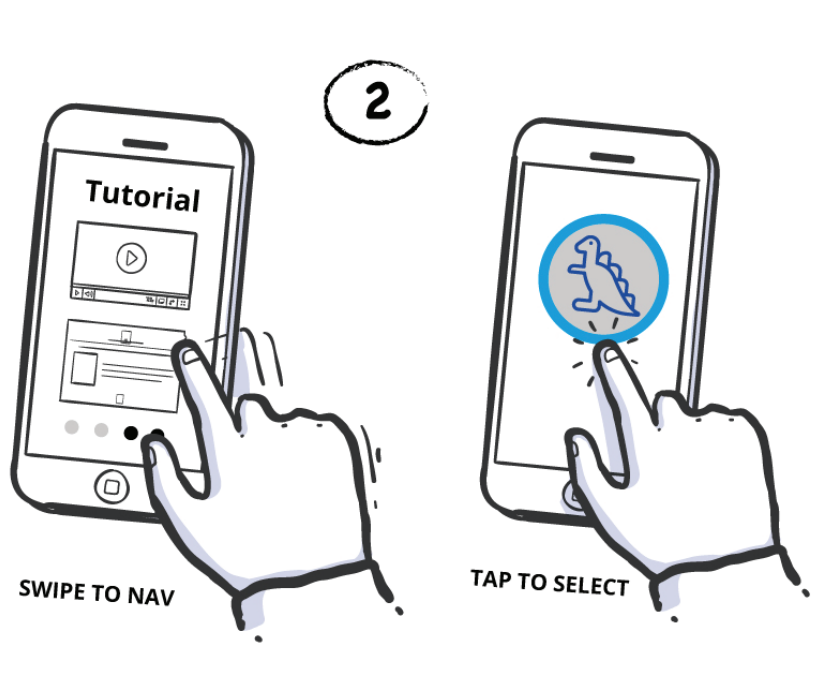
## Narrate the Experience

As the personas created, we started to think about the whole user experience for the personas as well as to envision the user's behavior and the app's features, We decided to draw a scenario/storyboard in order to articulate our desired user flow of the app. I found out this approach is especially helpful for team to focus on the features and interactions itself (we still talk about UI and design, but it's not the major focus in this stage). Further more, when I designed the storyboard with a finalized design scope and user group, the team and I could have a second brainstorm session and it generated a lot of better ideas that we dismissed in the early design session. Also, by telling the story of the users, we could refine our initial ideas about the features and information architecture of the app.

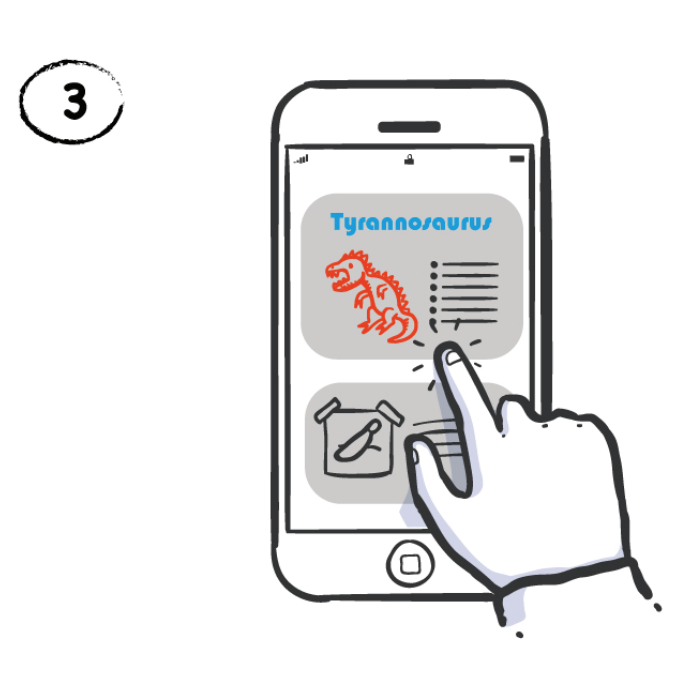
**David went to Natural History Museum to get more knowledge about dinasours after having the lecture in school.**



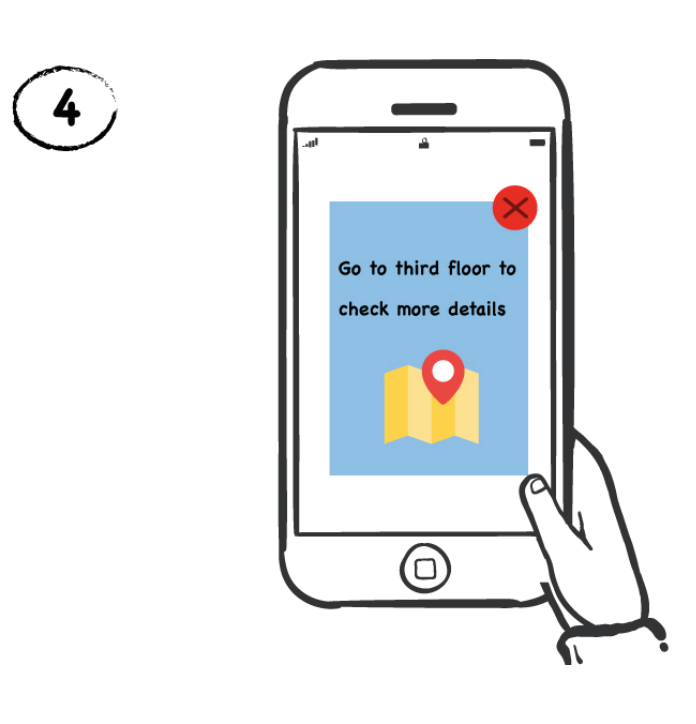
**He opened the app and found a tutorial for him to pick his interested object in the museum, so he clicked on dinasour icon.**



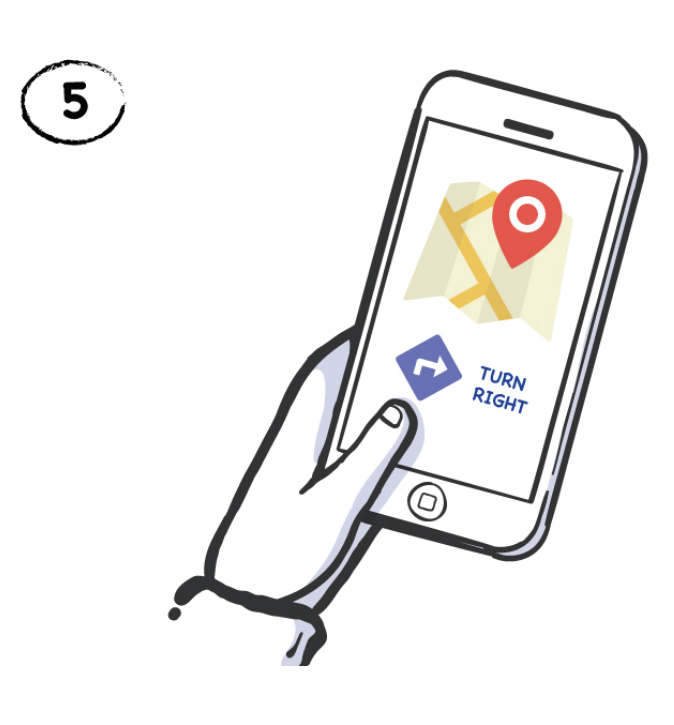
**In the main page, David found a section called "tyrannosaurus", and he would like to see the fossil of it. So he clicked on the section.**



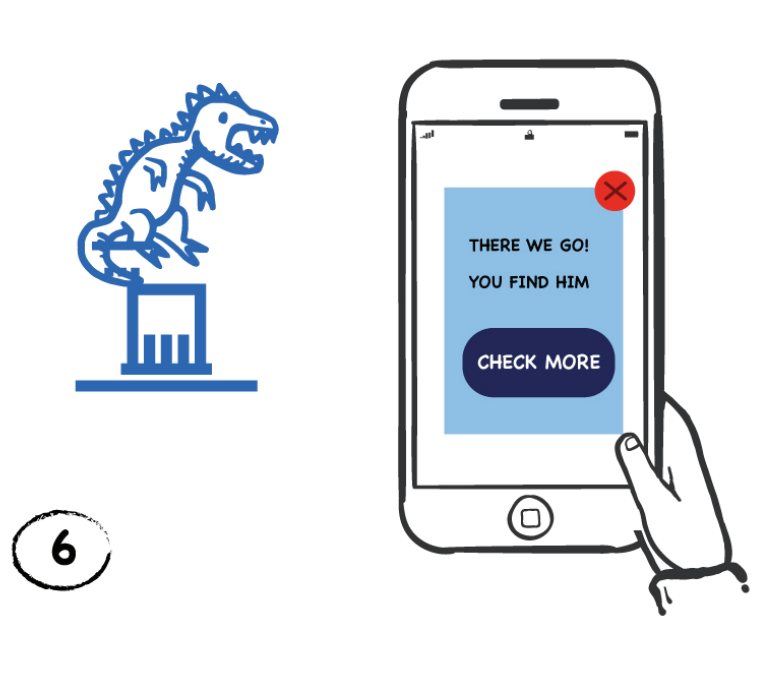
**The app told David he has to find the fossil first in the museum in order to check more fun fact of "tyrannosaurus"**


4
Go to third floor to check more details

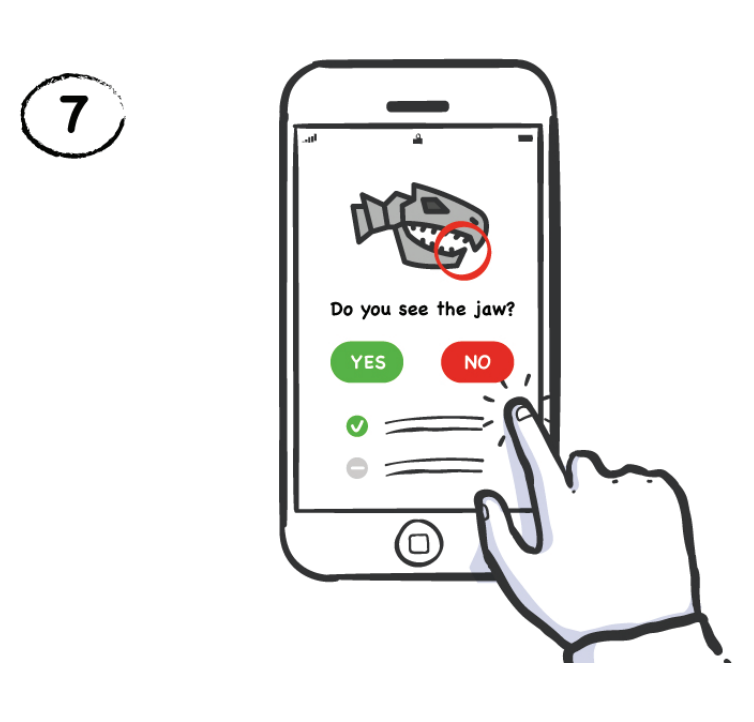
**Therefore, David opened the map of the museum and navigate through the instruction provided by the app.**



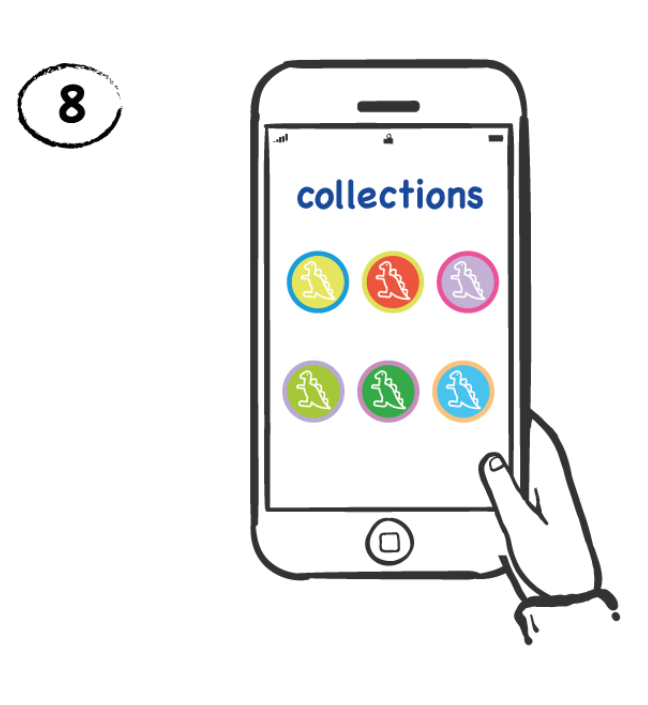
**There is a pop-up page when David approached to tyrannosaurus fossil, David open the page and see several activities inside the page.**


THERE WE GO! YOU FIND HIM
CHECK MORE
6

**David followed the intuctions of the page to check dinosaur's jaw and claw and complete the tasks and activities.**


7
Do you see the jaw?
YES
NO

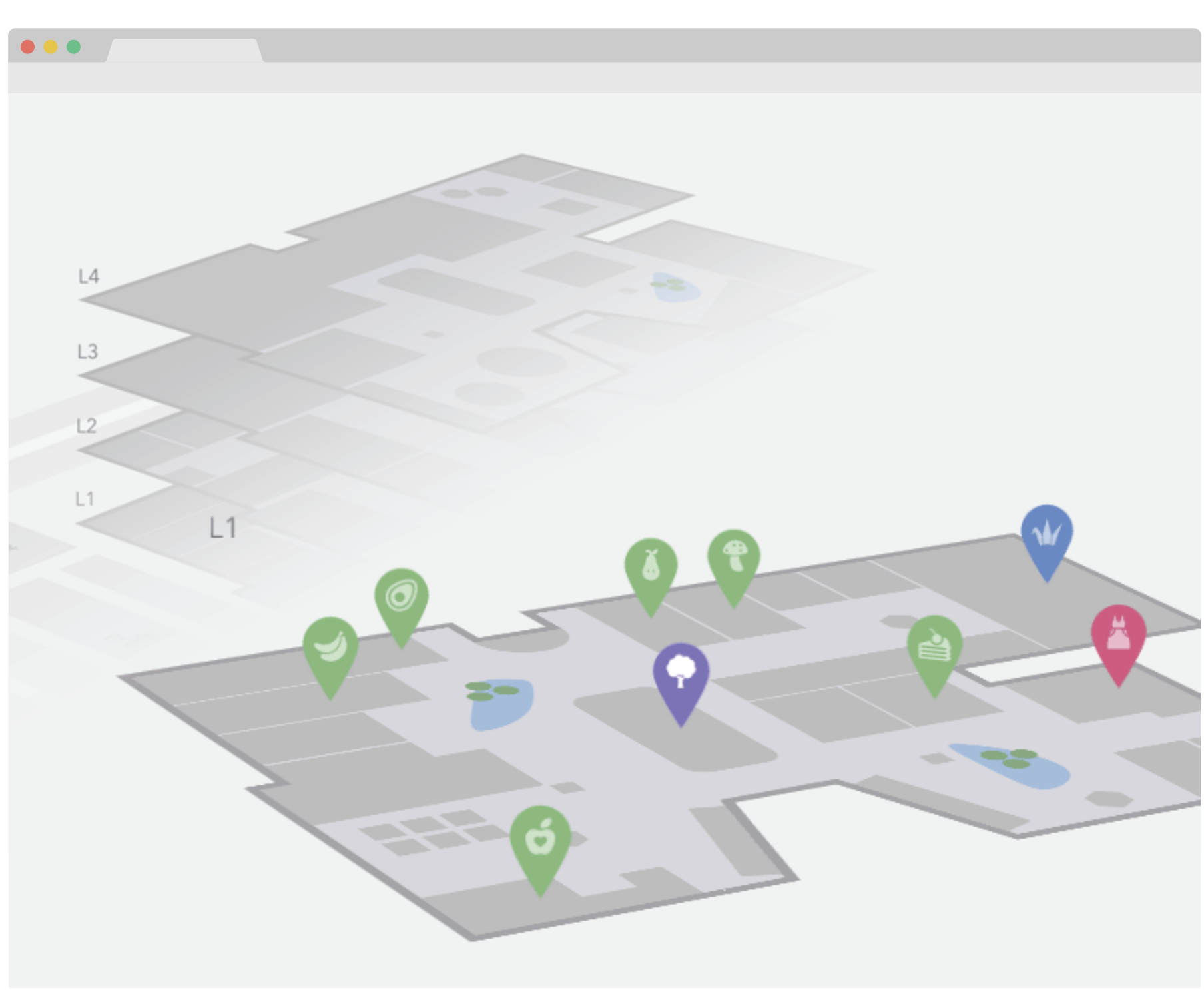
**After finished the tasks, Tyrannosaurus now becomes one of David's collection within the museum**



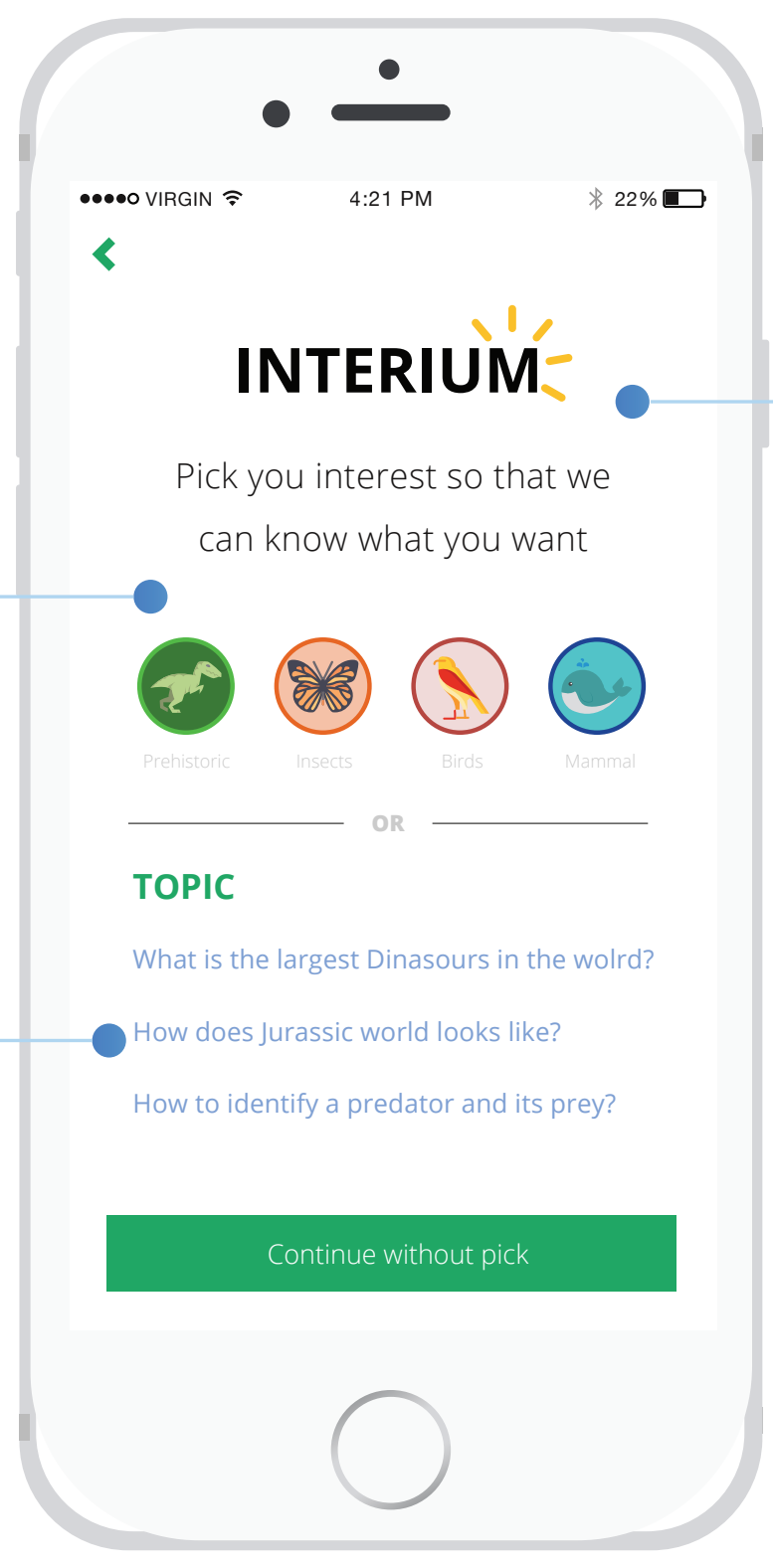
After digging out the design problems, user group and using scenarios, we put all the information and ideas into an iterative design thinking process, the team came up with several features that either to address those problems or to give the kid a better and delightful museum visiting experience.

## Interactive Map

The idea is to show a mall map with all its floors in perspective. Additionally, we have a search in a sidebar that allows to filter mall spaces. Once a floor is selected, we show some pins as indicators for the different stores/spaces. When clicking on a pin, we show some more details of that space.



## Discovery-Based Experience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INTERIUM

Pick you interest so that we can know what you want

OR

TOPIC

What is the largest Dinasours in the wolrd?

How does Jurassic world looks like?

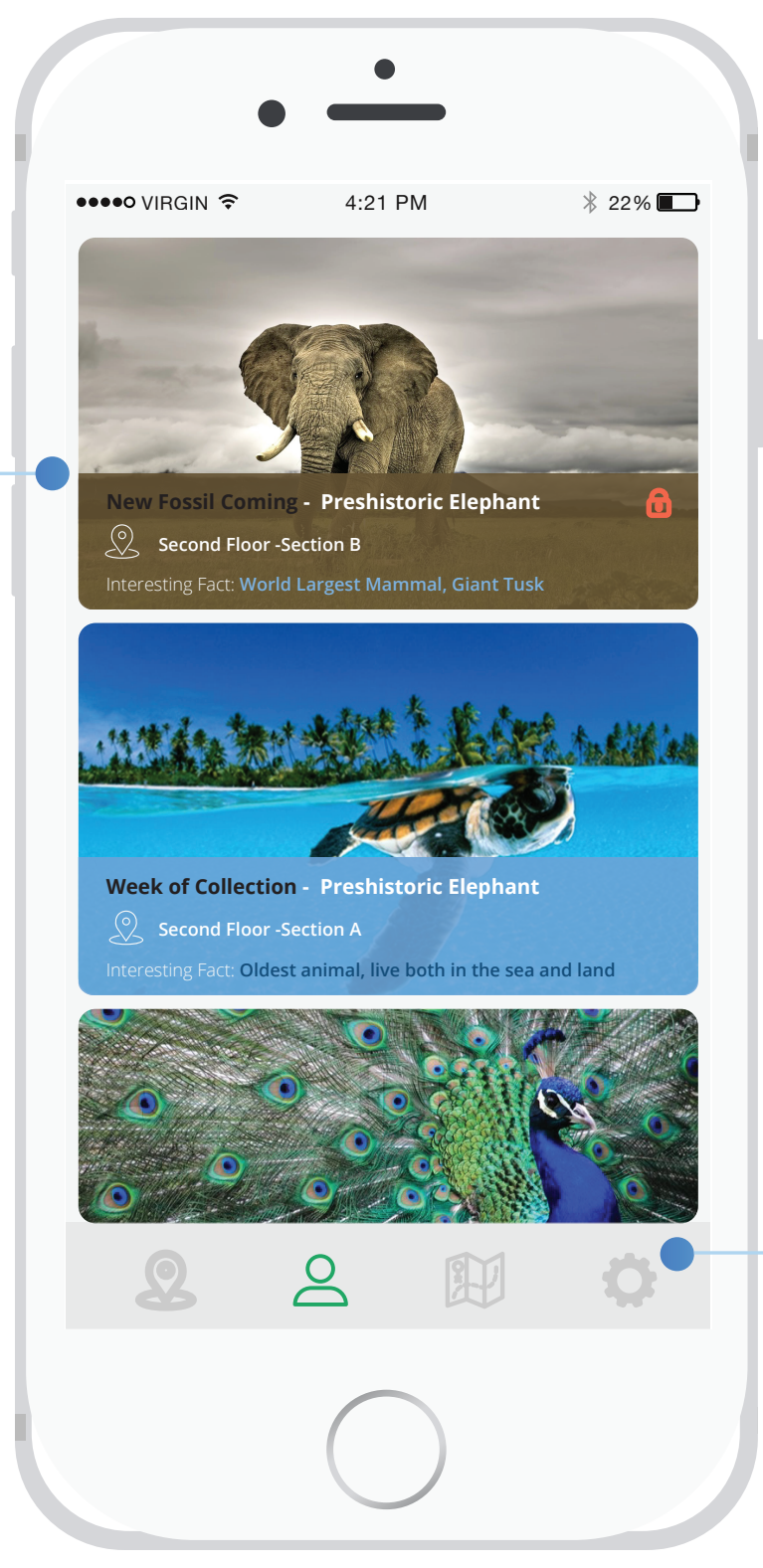
How to identify a predator and its prey?

Continue without pick

A intuitive tutorial to help users to learn about the app and the content in the museum

Customized learning objective, user pick whatever area they are interested in

Interium also provide basic and popular topics of the learners that do not have a preference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Second Floor -Section B

Interesting Fact: World Largest Mammal, Giant Tusk

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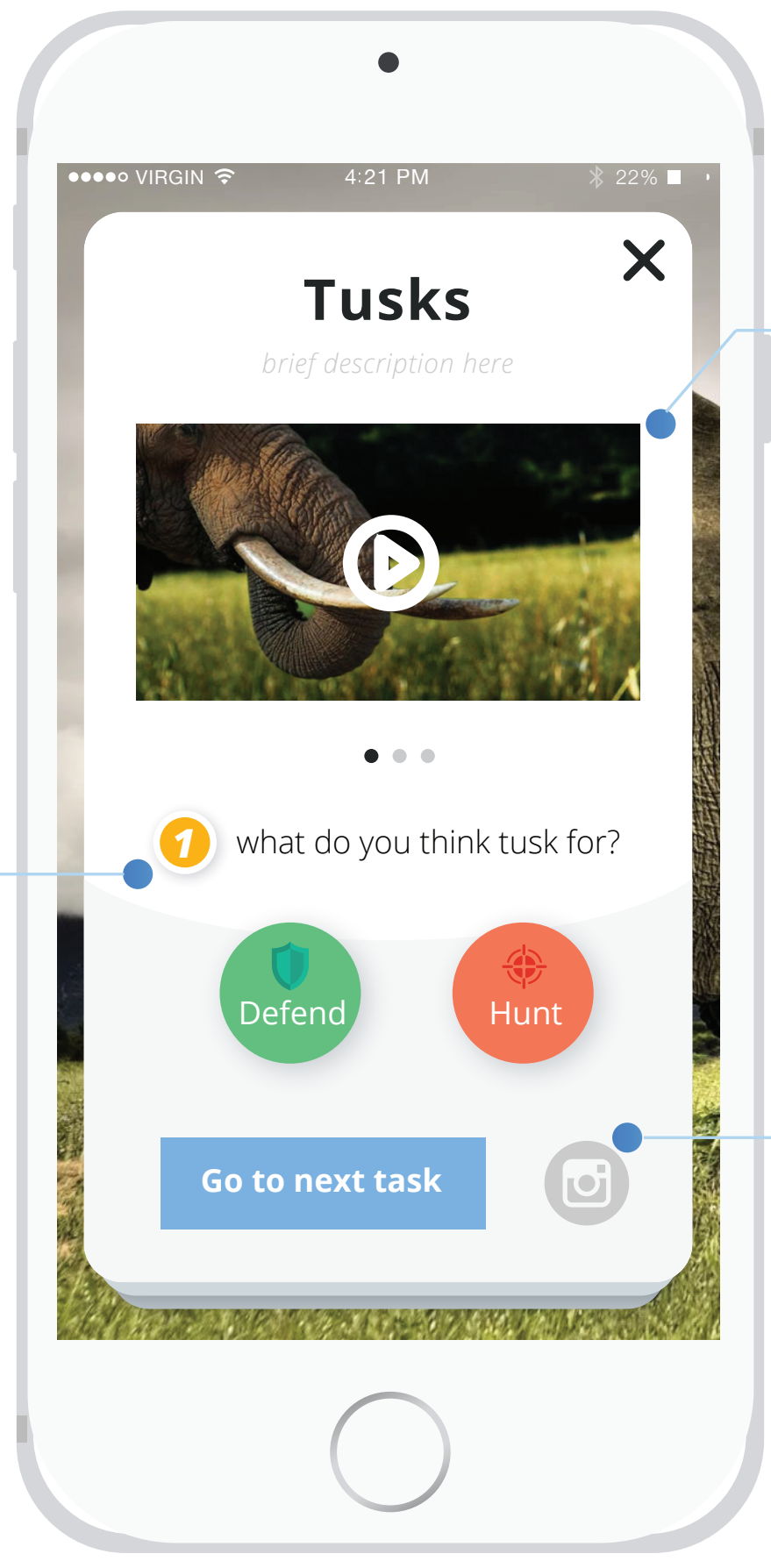
Interesting Fact: Oldest animal, live both in the sea and land

The social stream could be staff-picked content or user generated content

The navigation bar controls the activity of the learner, they could find scavenger link as well


Tusks

brief description here

1 what do you think tusk for?

Defend

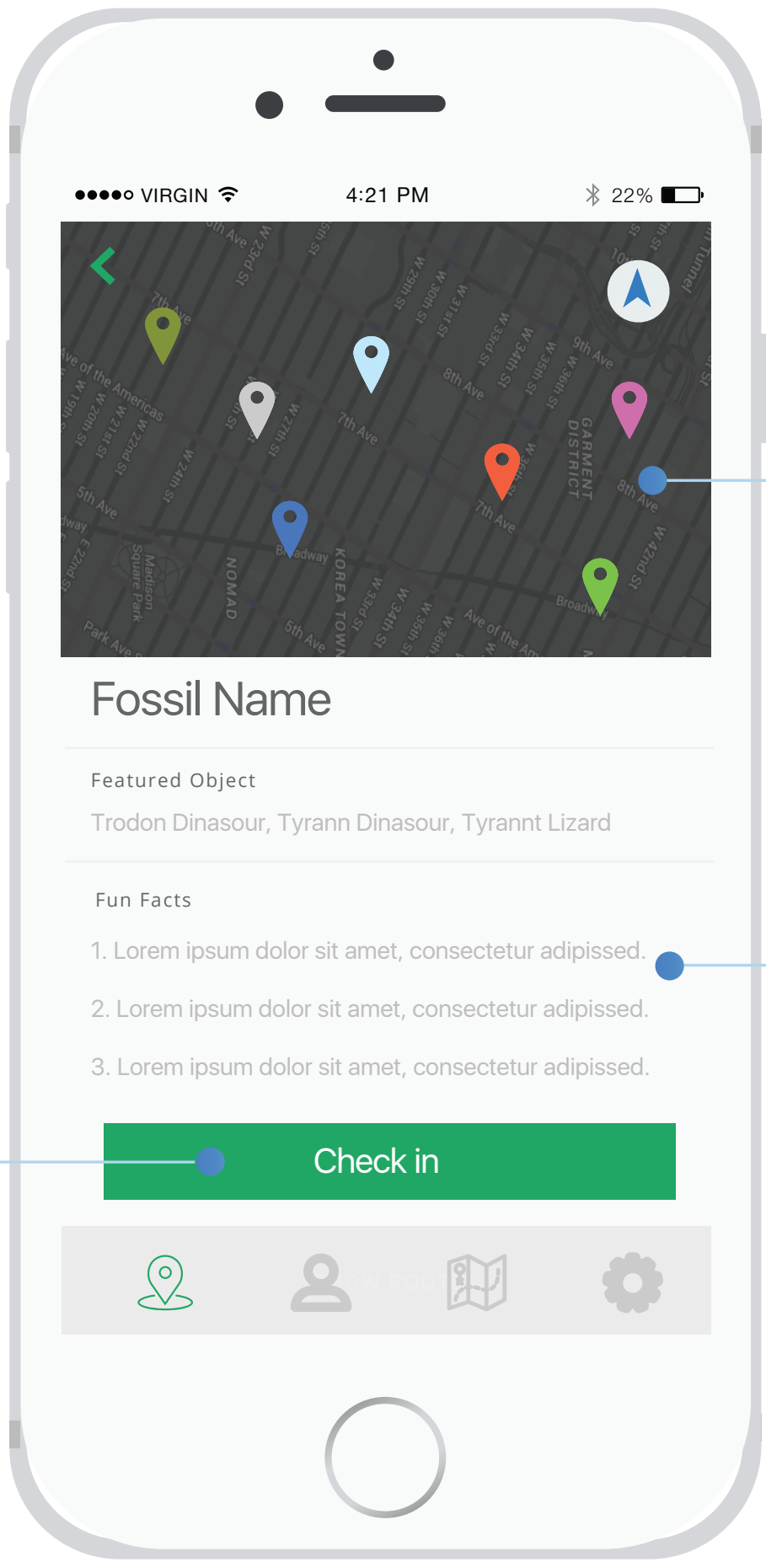
Hunt

Go to next task

The main content of the one museum item could be multiple media type, like video or audio

User has to complete several tasks in order to make sure they understand the concept

User can also take photo to save their work and favourites


Fossil Name

Featured Object

Trodon Dinasour, Tyrann Dinasour, Tyrannt Lizard

Fun Facts

1. Lorem ipsum dolor sit amet, consectetur adipissed.

2. Lorem ipsum dolor sit amet, consectetur adipissed.

3. Lorem ipsum dolor sit amet, consectetur adipissed.

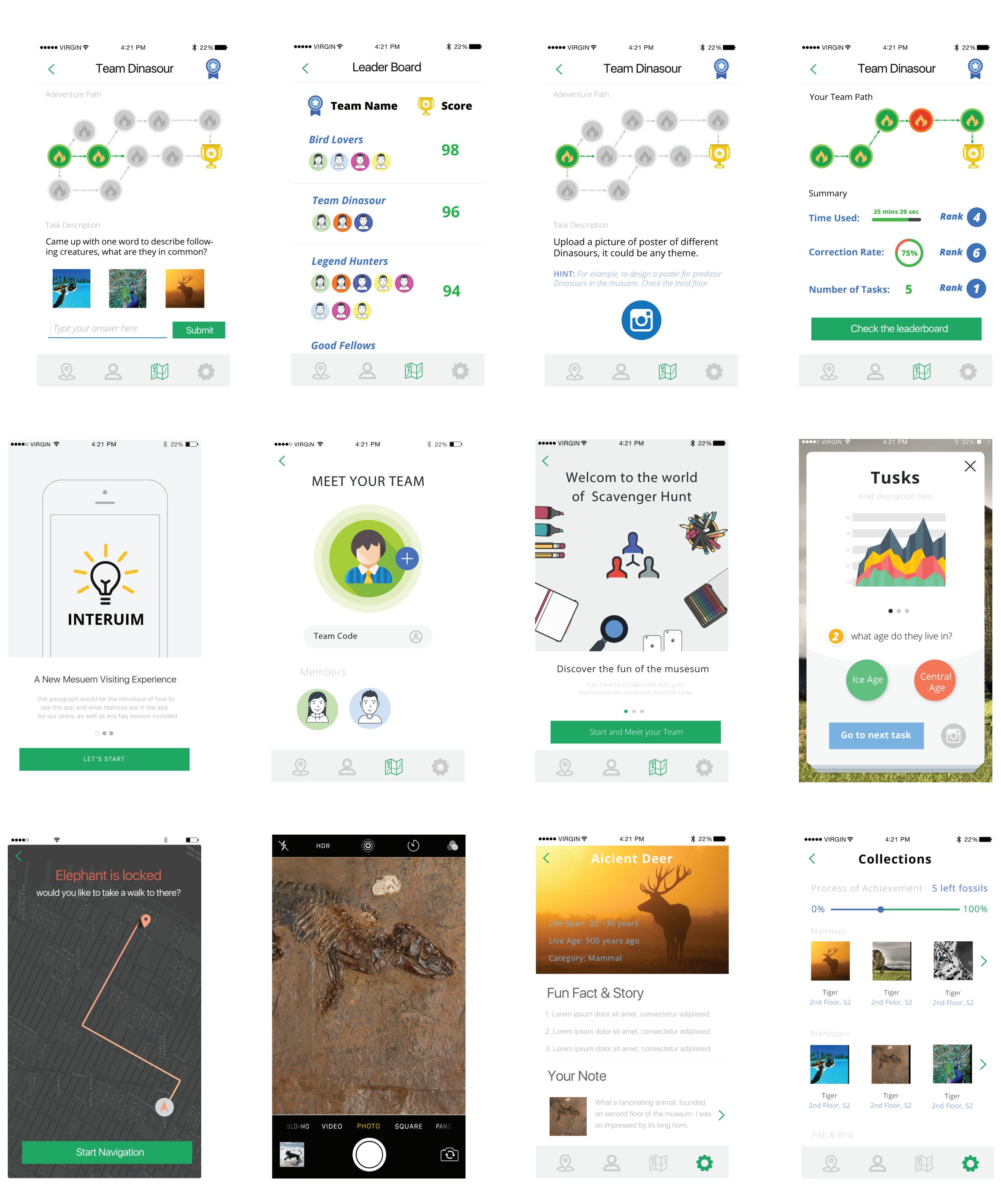
Check in

Whenever the kid approach to museum's object, the ibeacon detector will pop up the details of the object as well as its location in the museum, user can follow the instructions to find their interested fossil.

The detailed page shows the content of the fossil as well as the fun facts of the object.

we also put social elements here in order to let kids to share their visit/learnig material

## Other Screens


Team Dinasour

Adventure Path

Task Description

Came up with one word to describe following creatures, what are they in common?

Type your answer here

Submit

Leader Board

| Team Name | Score |
|---|---|
| Bird Lovers | 98 |
| Team Dinasour | 96 |
| Legend Hunters | 94 |
| Good Fellows | |

Team Dinasour

Adventure Path

Task Description

Upload a picture of poster of different Dinasours, it could be any theme.

HINT: For example, to design a poster for predator Dinasours in the musuem. Check the third floor.

Team Dinasour

Your Team Path

Summary

Time Used: 35 mins 20 sec Rank 4

Correction Rate: 75% Rank 6

Number of Tasks: 5 Rank 1

Check the leaderboard

INTERUIM

A New Mesuem Visiting Experience

this paragraph would be the introduce of how to use the app and what features are in the app for our users, as well as any faq session included

LET'S START

MEET YOUR TEAM

Team Code

Members

Welcom to the world of Scavenger Hunt

Discover the fun of the musesum

You have to collaborate with your teammates wo complete multiple tasks

Start and Meet your Team

Tusks

brief description here

2 what age do they live in?

Ice Age

Central Age

Go to next task

Elephant is locked

would you like to take a walk to there?

Start Navigation

HDR

SLO-MO VIDEO PHOTO SQUARE PANO

Aicient Deer

Life Span: 20 - 30 years

Live Age: 500 years ago

Category: Mammal

Fun Fact & Story

1. Lorem ipsum dolor sit amet, consectetur adipissed.

2. Lorem ipsum dolor sit amet, consectetur adipissed.

3. Lorem ipsum dolor sit amet, consectetur adipissed.

Your Note

What a fancinating animal, founded on second floor of the museum. I was so impressed by its long horn.

Collections

Process of Achievement 5 left fossils

0% 100%

Mammals

Tiger 2nd Floor, S2

Tiger 2nd Floor, S2

Tiger 2nd Floor, S2

Prehistoric

Tiger 2nd Floor, S2

Tiger 2nd Floor, S2

Tiger 2nd Floor, S2

Fish & Bird