

# Create a Feed Screen

## Native App Development

**Time:** 60 mins

## Introduction

In this class, the student/s will learn to add scrollable feed to the feed screen using const variable and FlatList component. Student/s will also learn to add like and comment icons and flag notification on clicking these icons.

## New Commands Introduced

- `data={feedsData}` Stores the feedsData to fetch within <FlatList> component.
- `renderItem={({ item }) => <FeedCard feed={item} />}` Renders each item of the feed to the FeedCard file
- `keyExtractor={(item) => item.feedId}` Assigning a unique key to each item of the feedID

## Vocabulary

- A **feed** is a stream of content that you can scroll through. The feed is updated on a **feed screen** of an app.
- The **FlatList** component is an efficient way to display items in a scrollable list view.

## Learning Objectives

Student/s should be able to:

- **Recall** use of array to store the feed.
- **Demonstrate** how to display the feed.
- **Explain** how to use FlatList to scroll the feed.
- **Add** like and comment icon and notify when clicked.

## Activities

1. **Class Narrative:** (2 mins)
  - Brief the student/s that Daisy is on a tour around the globe and wants to capture pictures. Hence she plans to create a SnapBuzz app to share the pictures among the travel community.
2. **Concept Introduction Activity:** (5 mins)
  - Let the student/s play the explore-activity and explore the SnapBuzz app.

- Ask students to sign up and check multiple screens. Ask student/s to click on the like and comment button on the feed screen to check the notification message in Logs .
- Explain the project structure for multi screen app and its benefit.
- Using the slides, explain that the student/s will learn:
  - to add the feed
  - to scroll the feed
  - to add like and comment icons

### 3. Activity 1: Add Feed Data: (12 mins)

#### **Teacher Activity:** (6 mins)

- Let the students observe the different elements on the feed screen..
- Explain to the student/s how to add feed and display profile image and username for the feed.

#### **Student Activity:** (6 mins)

- Guide the student/s to add feed data for 3rd feed and display image and caption for all the feeds.

### 4. Activity 2: Scroll the Feed Screen: (12 mins)

#### **Teacher Activity:** (6 mins)

- Explain to the student/s that the feed is not scrollable for an app but automatically scrollable for web on expo.
- Explain the use of the FlatList rendering component to scroll smoothly.

#### **Student Activity:** (6 mins)

- Guide the student/s to render the <FlatList> component on the feed screen.  
Probing question: Why is the FlatList component better than Scrollview?  
Expected answer: FlatList renders items when they are about to appear, and removes items that scroll way off screen to save memory and processing time.

### 5. Activity 3: Add Like and Comment Icons: (8 mins)

#### **Teacher Activity:** (6 mins)

- Explain how to find icons from react native elements and add them in an app.
- Add a like icon and flag a notification when it is clicked.

#### **Student Activity:** (8 mins)

- Guide the student/s to add a comment icon and and flag a notification in the Logs when it is clicked.

### 6. Introduce the Post class project: (2 min)

- Add the feed data for Bid & Buy app.

### 7. Test and Summarize the class learnings: (5 mins)

- Check for understanding through quizzes and summarize learning after respective missions.
- Summarize the overall class learning towards the end of the class.

### 8. Additional activities:

- Encourage the student/s to add a comment section and add comments for the feed. Also add styles for it in a StyleSheet.
- Encourage the student/s to create a Flatlist and display the comments data from the feed.

### 9. State the Next Class Objective: (1 min)

- We will learn to add a camera to the Snap Buzz App.

## U.S. Standards:

CSTA: 2-AP-11, 2-AP-12, 2-AP-13, 2-AP-14, 2-AP-16, 2-AP-19

| Links Table                                    |                        |   |
|--|------------------------|---|
| Activity                                       | Activity Name          | Link  |
| Class Presentation                             | Create a Feed screen   | <a href="https://s3-whjr-curriculum-uploads.whjr.online/43b2e026-cd96-4d9e-91ac-191e22100152.html">https://s3-whjr-curriculum-uploads.whjr.online/43b2e026-cd96-4d9e-91ac-191e22100152.html</a>   |
| Explore Activity                               | SnapBuzz App           | <a href="https://snack.expo.dev/@procodingclass/wad-402---56-ica-snapbuzz-feed---solution">https://snack.expo.dev/@procodingclass/wad-402---56-ica-snapbuzz-feed---solution</a>                   |
| Teacher Activity 1                             | Add Feed Data          | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-ta1-add-feed-data">https://snack.expo.dev/@procodingclass/wad-402---52-ta1-add-feed-data</a>   |
| Teacher Activity 1 Solution                    | Add Feed Data          | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-ta1-add-feed-data---solution">https://snack.expo.dev/@procodingclass/wad-402---52-ta1-add-feed-data---solution</a>                   |
| Student Activity 1                             | Add Feed Data          | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-sa1-add-feed-data">https://snack.expo.dev/@procodingclass/wad-402---52-sa1-add-feed-data</a>   |
| Teacher Reference: Student Activity 1 Solution | Add Feed Data          | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-sa1-add-feed-data---solution">https://snack.expo.dev/@procodingclass/wad-402---52-sa1-add-feed-data---solution</a>                   |
| Teacher Activity 2                             | Scroll the Feed Screen | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-ta2-scroll-the-feed-screen">https://snack.expo.dev/@procodingclass/wad-402---52-ta2-scroll-the-feed-screen</a>                       |
| Teacher Activity 2 Solution                    | Scroll the Feed Screen | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-ta2-scroll-the-feed-screen---solution">https://snack.expo.dev/@procodingclass/wad-402---52-ta2-scroll-the-feed-screen---solution</a> |
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| Teacher Reference: Student Activity 2 Solution | Scroll the Feed Screen | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-sa2-scroll-the-feed-screen---solution">https://snack.expo.dev/@procodingclass/wad-402---52-sa2-scroll-the-feed-screen---solution</a> |
| Teacher Activity 3                             | Add a Like Icon        | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-ta3-add-like-icon">https://snack.expo.dev/@procodingclass/wad-402---52-ta3-add-like-icon</a>   |

|   |                          |   |
|---|--------------------------|---|
| Teacher Activity 3 Solution                                 | Add a Like Icon          | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-ta3-add-like-icon---solution">https://snack.expo.dev/@procodingclass/wad-402---52-ta3-add-like-icon---solution</a>                                     |
| Student Activity 3  | Add a Comment Icon       | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-sa3-add-comment-icon">https://snack.expo.dev/@procodingclass/wad-402---52-sa3-add-comment-icon</a>   |
| Teacher Reference: Student Activity 3 Solution              | Add a Comment Icon       | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-sa3-add-comment-icon---solution">https://snack.expo.dev/@procodingclass/wad-402---52-sa3-add-comment-icon---solution</a>                               |
| Student's Additional Activity 1                             | Create a Comment Section | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-aa1-create-comment-section">https://snack.expo.dev/@procodingclass/wad-402---52-aa1-create-comment-section</a>   |
| Teacher Reference: Student's Additional Activity 1 Solution | Create a Comment Section | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-aa1-create-comment-section---solution">https://snack.expo.dev/@procodingclass/wad-402---52-aa1-create-comment-section---solution</a>                   |
| Student's Additional Activity 2                             | Display the Comments     | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-aa2-display-comments-using-flatlist">https://snack.expo.dev/@procodingclass/wad-402---52-aa2-display-comments-using-flatlist</a>                       |
| Teacher Reference: Student's Additional Activity 2 Solution | Display the Comments     | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-aa2-display-comments-using-flatlist---solution">https://snack.expo.dev/@procodingclass/wad-402---52-aa2-display-comments-using-flatlist---solution</a> |
| Post Class Project  | Add Feed Data            | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-pcp-add-feed-data---boiler">https://snack.expo.dev/@procodingclass/wad-402---52-pcp-add-feed-data---boiler</a>   |
| Teacher Reference: Post Class Project Solution              | Add Feed Data            | <a href="https://snack.expo.dev/@procodingclass/wad-402---52-pcp-add-feed-data---solution">https://snack.expo.dev/@procodingclass/wad-402---52-pcp-add-feed-data---solution</a>                                     |