Image Carousel

I have created an API on the server to display a list of image URLs that will be used as banners.

you can see the source code here: **/home/cayden/nodejs/production/controllers/newsController.js**

```js
exports.banner = async (req, res) => {
    try {
        data = [
            process.env.BASE_URL + "images/banner/1.png",
            process.env.BASE_URL + "images/banner/2.png",
            process.env.BASE_URL + "images/banner/3.png",
        ];

        res.status(200).json({ success: true, data: data });
    } catch (error) {
        res.status(500).json({ success: false, message: error.message });
    }
};
```

you can access this API with this link:
https://tempdev2.roomie.id/newsadmin/banner

To displaying list of images in our mobile app, follow these steps below.

we will use axios to accessing HTTP URL. Install axios with this command:
npm install axios

Install react-native-reanimated-carousel to display images as carousel banner with this command:
npx expo install react-native-reanimated-carousel

Edit **app\(tabs)\index.tsx** with this code:

```tsx
import React, { useState, useEffect } from "react";

import { View, StyleSheet, ScrollView, Dimensions } from "react-native";
import { Image } from "expo-image";
import { ThemedView } from "@/components/ThemedView";
import { SafeAreaView } from "react-native-safe-area-context";
import axios from "axios";
import Carousel, {
    ICarouselInstance,
    Pagination,
} from "react-native-reanimated-carousel";
import { useSharedValue } from "react-native-reanimated";
import { useColorScheme } from "@/hooks/useColorScheme";
import { Colors } from "@/constants/Colors";

//get display width
const width = Dimensions.get("window").width;

export default function HomeScreen() {
    //define empty array variable for images
    const [banners, setBanners] = useState([]);

    //set themes color according to device themes
    const colorScheme = useColorScheme();
    const themeCarousel =
        colorScheme === "light" ? styles.carouselLight : styles.carouselDark;
```

```
//call loadData function only once when the home page appears
useEffect(() => {
    loadData();
}, []);

//get data from server
const loadData = async () => {
    axios
        .get(`https://tempdev2.roomie.id/newsadmin/banner`, {})
        .then(function (response) {
            if (response.data.success == true) {
                //set banner variable with data from API
                setBanners(response.data.data);
            }
        });
};

const ref = React.useRef<ICarouselInstance>(null);
const progress = useSharedValue<number>(0);
const onPressPagination = (index: number) => {
    ref.current?.scrollTo({
        count: index - progress.value,
        animated: true,
    });
};

//content of the image banner to be rendered
const renderItem = ({ item }: { item: string }) => {
    return (
        <View
            style={{
                flex: 1,
                justifyContent: "center",
            }}
        >
            <Image
                style={styles.imageBanner}
                source={item}
                contentFit="contain"
            />
        </View>
    );
};

return (
    <SafeAreaView style={styles.saveContainer}>
        <ScrollView>
            <ThemedView style={styles.imageLogoContainer}>
                <Image
                    style={styles.imageLogo}
                    source={require("@/assets/images/logo.svg")}
                    contentFit="contain"
                />
            </ThemedView>

            <View style={[themeCarousel]}>
```

```jsx
                <Carousel
                    ref={ref}
                    width={width}
                    height={width / 2 - 22}
                    data={banners}
                    onProgressChange={progress}
                    renderItem={renderItem}
                    loop={true}
                    autoPlay
                    autoPlayInterval={5000}
                    mode="parallax"
                />

                <Pagination.Basic
                    progress={progress}
                    data={banners}
                    dotStyle={{
                        backgroundColor: "rgba(0,0,0,0.2)",
                        borderRadius: 50,
                    }}
                    containerStyle={{ gap: 10, marginTop: 0 }}
                    onPress={onPressPagination}
                />
            </View>
        </ScrollView>
    </SafeAreaView>
    );
}

const styles = StyleSheet.create({
    saveContainer: {
        flex: 1,
    },
    imageLogoContainer: {
        flex: 1,
        flexDirection: "column",
        alignItems: "center",
        height: 80,
        paddingTop: 10,
        marginBottom: 0,
    },
    imageLogo: {
        width: 80,
        height: 80 * (144 / 165),
    },

    carouselLight: {
        backgroundColor: Colors.light.background,
    },
    carouselDark: { backgroundColor: Colors.dark.background },
    imageBanner: {
        width: "100%",
        height: "100%",
    },
});
```

Run project with this command:

npx expo start

Result: