

Flickrly Documentation

Installing

1. Extract the Zip file and run the following command

```
npm run start
```

Libraries Used

Libraries

Name	Purpose
<u>Redux Saga</u>	Redux Middleware library
<u>Axios</u>	For making HTTP requests
<u>Bootstrap</u>	UI Library
<u>Dexiejs</u>	Wrapper for IndexedDB
<u>Faker</u>	Generating fake data for Testing components
<u>Font Awesome</u>	UI Library for Icons
<u>Lodash</u>	For data manipulations and generation
<u>Moment</u>	Date manipulation
<u>react-bottom-scroll-listener</u>	Listening for scroll bottom reach events
<u>React-css-loaders</u>	Css Loaders
<u>React-masonry-component</u>	To form Staggered views of photos
<u>React-medium-image-zoom</u>	Component to zoom images
<u>Reaviz</u>	Graphs
<u>Recharts, Reaviz</u>	Graphs
<u>Storybook</u>	Test individual Components in isolation
<u>Untitled</u>	

Storybook

To test components in isolation i've used Storybook. To run Storybook, use the following command

```
npm run storybook
```

Caching Mechanism

For the purpose of caching data. I've use IndexedDB . I've used a library called Dexie.js to read and write to IndexedDB. The following are the tables in indexedDB along with their indexes.

Tables

Name	Indexes
<u>groups</u>	groupid isFavorite text
<u>search</u>	groupid text
<u>images</u>	groupid isFavorite photoid

Implemented a middleware to check if data is present in the cache. If the data is not present, a network call is made to fetch the data and is immediately stored in IndexedDB for subsequent calls.

Middleware

Location: ('src/middleware/middleware.js')

Middleware

Name	Purpose
<u>Search Group Cache Check</u>	To check and get any recommendations corresponding to the current search query from the cache (IndexedDB)
<u>Get Groups Cache Check</u>	To check and get any groups for the corresponding search query from the cache
<u>Get Images for Group Check Cache</u>	To check and get any images corresponding to the selected group from the cache

Redux

Actions

Actions

Name	Purpose
<u>Search Groups</u>	Action for recommendation of groups with a given query in the search box
<u>Get Groups</u>	Action to get groups for a given search query.
<u>Get Images for Group</u>	Action to fetch the images of a group when a certain group is selected
<u>Load More Groups</u>	Action to load more groups when the user reaches the end of the page
<u>Load More Images</u>	Action to load more images when the user reaches the end of the page
<u>Make group favorite</u>	Action to make a particular group favorite
<u>Remove Group Favorite</u>	Action to remove a particular group from favorites
<u>Make image favorite</u>	Action to make a particular image favorite
<u>Remove Image Favorite</u>	Action to remove a particular image from favorites

Name	Purpose
<u>Select Group</u>	Action to select a particular group to load its images

Sagas

Sagas

Name	Purpose
<u>Get Groups</u>	To get the groups for a search query
<u>Search Groups</u>	To get recommendations for a search query
<u>Get Images for Group</u>	To get images for a selected group
<u>Load More Groups</u>	To load more groups when the user reaches the bottom of the page
<u>Load More Images</u>	To load more images when the user reaches the bottom of the page

Feature Additions from previous version

- Make groups favorite
- Make Photos favorite
- Favorites section on top right corner
- Lazy Loading
- Zoom Images
- Staggered View