**Social Searcher iOS Application**

1. Project Name: SocialSearcher
2. About Project
   1. You need to open ‘SocialSearcher.xcworkspace’ file to complile and run the application
   2. All open source projects are imported using ‘cocoa pods’ commands.
   3. I created git repository form the very first time I started write the application
   4. I have own coding convention and style. This project is follows my coding convention and style. I manage a document that describing those coding convention and style at the github (https://github.com/op1000/ CodingStyleGuide). Although this document is written in Korean, I will prepare English version later soon.
   5. This project uses prefix ‘NC’ on all classes name which is followed from my initial name ‘NCJung’.
   6. I used new tech-knowledges introduced at WWDC 2015 such as StackView using autolayout in storyboard, UI automation using xCode not instrument.
   7. Some features are not supported under iOS 9.0. Therefore I set the target deploy setting to iOS 9.0. So this project produces compile error on under iOS9.0.
   8. By using autolayout feature I can manage all iOS mobile devices to fit adequately, including portrait mode and landscape mode.
   9. Memory warning detecting and adequate codes is also implemented at all didReceiveMemoryWarning function.
3. Model Classes
   1. NCImageCachingManager: Image caching class that saves image data to mobile disk.
   2. NCURLManager: Manages URL manipulation, create/delete folders.
   3. NCYoutubeDataManager: Communicate with Youtube API and save results to NSDictionary. Uses delegate to communicate with user classes like UI.
   4. NCYoutubeDataContainer: Saves Youtube API search results. This class is Singleton class.
   5. NCUtilManager: Aggregated simple functions as static.
4. Youtube API calls
   1. Recommended channel list
      1. Calls https://www.googleapis.com/youtube/v3/guideCategories: fetches ‘ChannelID’ only with the call.
      2. Then call https://www.googleapis.com/youtube/v3/playlists: fetches channel list from the results. For fetching next page, I use ‘nextPageToken’ field. The ‘nextPageToken’ field value stored in NSDictionary defined at NCYoutubeDataContainer class.
   2. Video list
      1. Calls https://www.googleapis.com/youtube/v3/playlists: fetches channel’s video list. For fetching next page, I use ‘nextPageToken’ field. The ‘nextPageToken’ field value stored in NSDictionary defined at NCYoutubeDataContainer class.
      2. Each cell calls https://www.googleapis.com/youtube/v3/videos: fetches duration info from the result.
   3. Youtube search
      1. Calls https://www.googleapis.com/youtube/v3/search: fetches searched list from the results.
5. Unit testing classes
   1. NCYoutubeDataManagerTests: Tests NCYoutubeDataManager
   2. NCMainViewControllerTests: Tests main UI, landscape, portrait, play video. This UI test mechanism is pretty new and also experimental.
   3. NCSearchViewControlerTests: Tests search UI, landscape, portrait, play video. This UI test mechanism is pretty new and also experimental.
   4. NCVideoListViewControllerTests: Tests video list UI, landscape, portrait, play video. This UI test mechanism is pretty new and also experimental.
6. UI flow
   1. You can check UI flow at ‘Main.storyboard’.

