

Implementation of Share Extension in our project

1. Following these two articles we developed the Share Extension feature for iOS.
 - https://developer.apple.com/documentation/foundation/app_extension_support/supporting_suggestions_in_your_app's_share_extension
 - <https://medium.com/flutter-community/receive-sharing-files-to-flutter-app-from-another-app-7a84c0c0cd88>
2. Adding Share Extension is an easy approach where we can simply add a target in the swift project from Xcode and it will be shown in our app.
3. But Intent suggestion in the app's share extension is not pretty straight forward so for that we need to edit info.plist of Runner and edit info.plist of Share Extension in a correct way.
 - We need to add these things in info.plist/Runner

```
<key>NSUserActivityTypes</key>
<array>
  <string>sampleConversationIdentifier</string>
  <string>INSendMessageIntent</string>
  <string>sampleConversationIdentifier1</string>
```
 - We also need to add other things in info.plist/ShareExtension and it is mentioned in the apple documentation from the above URL 1.
4. The share extension suggestion will only appear in simulator version 15.0 to 15.5 and not in other versions but if you run in real device it will run perfectly fine and intent option will show in any version above 13.0

In iOS while trying to share some URLs from Safari our app does not appear in the share sheet

1. We are trying to send a URL from the share extension but our app does not appear in the share sheet for some URLs.
2. let me clarify while trying to share some URLs like <https://flutter.dev/> and <https://www.google.com/> the share sheet is showing our app and suggestions of people.
3. But while trying to share URLs like <https://en.wikipedia.org/wiki/Google> and <https://www.youtube.com/> the share sheet is unable to show our app and the suggestion of people.
4. I tried adding different NSExtensionActivationRule from Apple documentation but none of them solved the problem.
 - https://developer.apple.com/documentation/bundleresources/information_property_list/nsextension/nsextensionattributes/nsextensionactivationrule
5. Lastly we changed the NSExtensionActivationRule from a list of dictionaries to some string configuration like below and it finally worked.

Problem

```
<key>NSExtensionActivationRule</key>
<dict>
  <key>NSExtensionActivationSupportsFileWithMaxCount</key>
  <integer>15</integer>
  <key>NSExtensionActivationSupportsImageWithMaxCount</key>
  <integer>15</integer>
  <key>NSExtensionActivationSupportsMovieWithMaxCount</key>
  <integer>15</integer>
  <key>NSExtensionActivationSupportsText</key>
  <true/>

  <key>NSExtensionActivationSupportsWebURLWithMaxCount</key>
  <integer>15</integer>
</dict>
```

Solution

```
<key>NSExtensionActivationRule</key>
<string>
  SUBQUERY (
    extensionItems,
    $extensionItem,
    SUBQUERY (
      $extensionItem.attachments,
      $attachment,
      ANY $attachment.registeredTypeIdentifiers
      UTI-CONFORMS-TO "public.url" OR
      ANY $attachment.registeredTypeIdentifiers
      UTI-CONFORMS-TO "public.image" OR
      ANY $attachment.registeredTypeIdentifiers
      UTI-CONFORMS-TO "public.movie" OR
      ANY $attachment.registeredTypeIdentifiers
      UTI-CONFORMS-TO "public.text"
    ).@count > 0
  ).@count > 0
</string>
```