## Excessive Permission Annotation Instructions

Below are the instructions we used for the manual annotations needed for the benchmark labeling in the paper (Section Evaluation).

### Instructions
Consider the following service permission scope:
(IFTTT must obtain permission from the service provider for correct functionality.)
\ <please example="" of="" our="" paper\="" running="" see=""></please>
<del></del>
Q1: Does IFTTT request more permission for this service?
- [ ] Yes - [ ] No
Q2: If the answer is Yes for Q1, could you list the excessive permissions?
[a list of excessive permissions]
**Excessive Permission:**
We take our running example to illustrate the benchmark process:
APIs provided by IFTTT:
Links to APIs homepage: <a href="https://ifttt.com/onedrive/details">https://ifttt.com/onedrive/details</a>
OAuth page:
See running example of our paper:
IFTTT needs your permission to:

View your profile info and contact list

IFTTT will be able to see your profile info, including your name, gender, display picture, contacts, and friends.

## Access your info anytime

IFTTT will be able to see and update your info, even when you're not using this app.

## Access your email addresses

IFTTT will be able to see the email addresses in your profile.

## Access your photos and videos

IFTTT will be able to see your photos and videos on MyDrive, along with their tags and comments.

## Access and edit your MyDrive photos and documents

IFTTT will be able to access, change, and add or delete your photos and documents on MyDrive.

We take the last ```IFTTT will be able to access, change, and add or delete your photos and documents on MyDrive.``` as an example here:

It contains all 8 (operation, object) pairs as listed below.

- 1. (access, photos)
- 2. (access, documents)
- 3. (change, photos)
- 4. (change, documents)
- 5. (add, photos)
- 6. (add, documents)
- 7. (delete, photos)
- 8. (delete, documents)

Next, we discuss for each (operation, object) pair, whether it's excessive or non-excessive and our reasons for marking it as excessive/non-excessive.

- 1. it's non-excessive, based on requirement of <u>OneDrive History of photos with a tag uploaded in folder (ifttt.com)</u>
- 2. It's non-excessive, based on requirement of <u>OneDrive History of files uploaded in folder (ifttt.com)</u>

- 3. It's excessive, we look through all the api provided by ifttt, and it's not required by any api
- 4. It's non-excessive, based on requirement of <a href="OneDrive Append to a text file">OneDrive Append to a text file</a> (ifttt.com) which require to modify/change a file/document
- 5. It's excessive
- 6. It's non-excessive, based on requirement of <a href="OneDrive Add file from URL (ifttt.com">OneDrive Add file from URL (ifttt.com)</a>
- 7. It's excessive
- 8. It's excessive