Proposal for GSoC 2022

Improve the picture selector of the Commons Android app

Project Abstract

The Commons app allows Android users to select pictures from their phone for upload to Wikimedia Commons.

Project Overview

Description

The picture selector is great but could be improved:

- Fast scrollbar.
- UI to mark some pictures as "not for upload" (for instance family pictures).
- Hide/unhide marked pictures.
- Minor change to the selection indicator.
- Gestures and indicator when previewing a picture full-screen.

More details: GitHub issue

Skills required: Android development, Git. No Mediawiki experience required.

Possible mentors: User:Syced and Aditya

Expected size of project: 350 hours

Difficulty rating: medium

Prototype

General picture selector production steps:

Step 1: scan and load pictures from the mobile phone memory card;

Step 2: show pictures;

Step 3: select a picture;

Step 4: return the selected picture to the caller.

We will add the following features based on the existing wiki image selectors/popular selectors:

- Uploaded/unuploaded mark
- The preview image.
- Scroll bar
- Hide display picture
- Layout change of selector

If you have enough time, you may be able to optimize some of the UI or add additional features



Reference Item:

https://github.com/zhihu/Matisse https://github.com/liuling07/PhotoPicker Uploaded/unuploaded mark and preview image's Implementation

We will reference/mimic related components to implement the desired functionality.

reference material:

https://github.com/donkingliang/ImageSelector

Scroll bar, Hide display picture, Layout change of selector' Implementation

We'll look at the code for the display, adding scroll bars, changing buttons, and permissions to customize images in its image display section

reference material:

https://github.com/DroidNinja/Android-FilePicker

Development Process

Community Bonding (May 20 - June 12)

The task at this stage is to get to know the project in depth, and maybe solve some bugs along the way. Do some research on the required technology, talk to community developers and mentors, and change some technical steps or plans.

Coding Phase 1 (June 13 - July 25)

There are 6 weeks in Coding Phase 1 and an evaluation after the phase. The goal of stage 1 is to complete the Format conversion function on Android. It needs to write some key code.

Week 1-3 (June 13 - July 4)

I'm going to implement the preview image.

Week 4-6 (July 5 - July 25)

The next step is to realize the event/unevent mark function, Images/files will be uploaded by default, we can also manually set it to upload not upload, and the App will get an exciting

release update. We will pass the first assessment at the same time. Once the goals of this phase have been achieved, we review the code and fix any known bugs in the previous code. And writing code should be documented.

Coding Phase 2 (July 25 - September 04)

There are 6 weeks in Coding Phase 2 and an evaluation after the phase. We will continue to complete some key tasks and more as we see fit.

Week 1-2 (July 25 - Aug 8)

We will finish "Scroll bar, Hide display picture" and "Layout change of selector".

Week 3-4 (Aug 8 - Aug 22)

If time is enough, I will add more functions, such as UI optimization, useless code removal, more agile and stable selector.

Week 5-6 (Aug 22 - September 04)

Maybe pick up where we left off the last few weeks. Some problems should be solved in this week. Once the goals of this phase have been achieved, we review the code and fix any known bugs in the previous code. And writing code should be documented. And then our work is basically done, and then the final evaluation.

Buffer Time (7 days)

There are 9 buffer days in case something didn't go as planned in the weeks before. I think some of the work might take less than two weeks, so we'll actually move faster and have more fault tolerance

More about Me

Applicant Info

Name: Sen Fang (Wirth)

Email:wirth.fang@foxmail.comGithub:github.com/FangSen9000

Time Zone: UTC+08:00 (China) Location: Zhengzhou, China

Education: Henan University, Victoria University, Australia, double major in

Computer Science and Technology. sophomore.

Telephone: +86 18143465655 CSDN blog: Wirth's blog (Chinese)

Self-introduction

As for me, I am a pathfinder, I love open source, and really enjoy the atmosphere of GSoC. When I worked in a virtual reality lab, I enjoyed applying algorithms to practice. It is worth mentioning that I have experience in bytedance youth training camp, which is just like Microsoft Exploration Program or Google Step Program. As the Contributor guide says, I get to know the project as quickly as possible and create branches to get familiar with the project. I am very happy to participate in the wikimedia project, I have full confidence in its prospects, and I will continue to contribute to the project even after the GSoC ends.