Tel-Aviv University, summer 2013

SummaPhoto

*Summing up your day!*



**Software documentation**

Introduction:

summaphoto ® *is a photo app that creates hot-outta-the-oven new collages consisting of your life’s most precious moments. SummaPhoto divides your day into its primary events, and then makes a beautiful collage out of your photos! It’s like an automatic diary that you can view, share and enjoy forever.  
Simply choose your preferred mode of operation, your preferred style, and you’re set!*

Specifications:

The application was developed using JRE6, as required on Android.

The application was tested on the following:

Minimum API Level: **Android 2.1 Eclair (API level 7)**

Maximum API Level: **Android 4.3 Jelly Bean (API level 18)**

Permissions:

-Read/Write to Internal Storage

-Connection to the Internet

Code Structure:

The main packages and general flow of the application:

1. *com.summaphoto -*

This package holds the only Activity and Service used by the app.

* SettingsActivity – The main and only activity (GUI) in the application.
* PhotoListenerService – The main service in the application. It runs as long as the app is open (not necessarily visible) and consists of a CameraObserver object that listens to the DCIM\Camera folder for new (or deleted) photos.

1. *Common:*   
   This package consists of the objects that are used by more than one other package in the app.

* ActualEvent – A sole event that can be recognized by DBScan algorithm
* ActualEventBundle – The output of a the clustering algorithm. It’s a bunch of ActualEvents ties together for the collage to choose photos from.
* Photo – representation of a photo file, including the EXIF metadata that comes with it, such as: Width, height, Date Taken, orientation.
* PhotoContainer – A singleton that contains a list of fresh photos intercepted by the listener service, and a list of photos that are ready to be reviewed by the clustering algorithm.

1. ActivationManager:

**finally** {

The project before you represents hours of hard work, many efforts and ToughLifeExceptions, but also a lot of challenging moments and funky collages that led us to the final product.

We truly hope that you find the application interesting at least as we do.

Sincerely,

SummaPhoto team

Omri Koshorek & Yonatan Wilkof

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