Aerial Clicker Mobile Requirements

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| REQ No.  1 | Project  Aerial Clicker |

Abstract

This document covers requirements for Aerial Clicker Mobile Version Phase 1.

| **Rev** | **Date** | **Author** | **Status** |
| --- | --- | --- | --- |
| 1 | 12/15/2014 | Ji Lucas | First draft |
| 2 | 01/05/2015 | Ji Lucas | Updated aerial clicker choice json property |
|  |  |  |  |

Distribution List

|  |  |
| --- | --- |
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Aerial Clicker Mobile

# Introduction

The purpose of the “Aerial Clicker” is to crowd-source the tagging of aerial imagery captured by UAVs in humanitarian settings. Aerial Clicker’s users will trace object(s) using map drawing tools based on the business requirement.

On phase 1, Aerial Clicker should expect to perform the below tasks:

1. User should be able to draw polyline or/and polygon or free drawing.
2. User should be able to draw multiple objects
3. Aerial Clicker should be generate geojson of tracing
4. Aerial Clicker should have 2 buttons. One is for “Not found” and “Submit”

# Related Documents/Links/People

References in the text throughout this document appear in square brackets (e.g., [1], [JS]).

| **Reference** | **Document/Link/Person/Application** |
| --- | --- |
|  | MicroMappers http://clickers.micromappers.org/ |
|  | Aerial Clicker Desktop Version : http://clickers.micromappers.org/app/MM\_RemoteSenseClicker/ |
|  | Aerial Clicker data output:  http://maps.micromappers.org/2014/conservation/skyeye/ |
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# Glossary

| **Term** | **Definition** |
| --- | --- |
| MicroMappers | A cloned customized of Pybossa platform for tagging by Digital Humanitarians http://clickers.micromappers.org/ |
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# Enhancement Scope

## Goals and Objectives

1. Build a mobile version application that handles incoming data from Aerial Clicker DATA.
2. Mobile Version should be available for iOS & Android
3. It should will generate data that contains geojson

## In Scope

1. iOS version Aerial Clicker
2. Android version Aerial Clicker
3. Data output generation
4. Data pulling via Clickers.MicroMappers.org API
5. Data push to Clickers.MicroMappers.org API
6. Geometry drawing
7. Tablet device only

## Out of Scope

1. Smart phone device support

## Assumptions

1. Assumed that Clickers.MicroMappers.org is running without any interruption.
2. Desktop Aerial Clicker version is running
3. Trainers-aidr-api or/ clickers-api is running
4. 1st release, we will focus on tablet only. For future dev. We will consider smart phones.

## Constraints

1. Skybox data will be available in Feb. We would like to use Aerial clicker app.

## Dependencies

## Risks

# Requirements

The following subsections define software requirements. Each requirement is labeled as follows:

* **ID.** The unique identifier for the requirement.
* **Requirement.** A clear and concise description of the requirement.
* **Source.** A cross-reference to the source of the requirement.
* **Cat**egory**.** A classification for the requirement using the selections from Table 1.

Table 1 - Requirement Categories

| **Category** | **Description** |
| --- | --- |
| **M**andatory | Required minimum functionality. |
| **O**ptional | Nice to have and will be implemented if time permits. |
| **F**uture | Will not be implemented now but should be considered for a future enhancement. |
| **D**ropped | Requirement determined to be completely out of scope **after** baseline. |
| **E**xisting | Functionality already present in the software (for documentation purposes). |
| **Op**erational | Will not be addressed in the software (documented for training purposes). This requirement should have a related item in the issue list in order to identify an owner. |

## Overview



## Aerial Clicker Mobile Requirements

### General Requirements

| **ID** | **Requirement** | **Source** | **Cat** |
| --- | --- | --- | --- |
| .1 | User should be able to draw line or polygon |  | M |
| .2 | User should be able to delete drawings |  | M |
| .3 | User should be able to modify drawings |  | M |
| .4 | User should be able to draw multiple lines or polygons |  | M |
| .5 | User should be able to submit his/her drawings |  | M |
| .6 | User should be able to go to next task if no drawing is required by clicking a button(e.g : No found button) |  | M |
| .7 | Clicker should send drawing data to MicroMappers after user submits his/her drawing or selection “not found” button |  | M |
| .8 | All drawing data should have proper geojson format data |  | M |
| .9 | When no task is available, clicker should give proper message |  | M |
| .10 | Clicker app should request all active clickers |  | M |
| .11 | Active app’s choice of aerial clicker should translated to LayerType |  | M |
| .12 | User’s unique identification should be sent via http header as same as other type clickers |  | M |
|  |  |  | M |
|  |  |  | M |
|  |  |  | M |

### Trainer API Activate clickers info data

[

{

"deploymentID": 1,

"clientAppID": 39,

"choices": "[{\"qa\":\"Displacement\"},{\"qa\":\"Not Relevant\"},{\"qa\":\"Requests\"},{\"qa\":\"Damage\"},{\"qa\":\"Other\"},{\"qa\":\"Not English\"}]",

"clientAppName": "Text Clicker",

"appType": 1,

"appTypeName": "Text Clicker"

},

{

"deploymentID": 2,

"clientAppID": 41,

"choices": "[{\"qa\":\"severe\"}, {\"qa\":\"mild\"}, {\"qa\":\"none\"}]",

"clientAppName": "Image Clicker",

"appType": 2,

"appTypeName": "Image Clicker"

},

{

"deploymentID": 3,

"clientAppID": 45046,

"choices": "[{"qa":"healthy", “color”: “blue”, “icon”: “http://iconURL”}, {"qa":"unhealthy", “color”: “red”, , “icon”: “http://iconURL”}]",

"clientAppName": "MM\_Aerial\_Hagupit",

"appType": 5,

"appTypeName": "Aerial Clicker"

}

]

### Input data example

**{**

**"info": {**

**"category": "https://s3-ap-southeast-1.amazonaws.com/skyeye-multiform/micromappers-sample2/d1f4f5\_d2f1f2\_leyte\_mosaic\_group12637.JPG",**

**"mediasource": null,**

**"url": "https://s3-ap-southeast-1.amazonaws.com/skyeye-multiform/micromappers-sample2/d1f4f5\_d2f1f2\_leyte\_mosaic\_group12637.JPG",**

**"question": "please tag it.",**

**"mediaSize": "[1024,1024]",**

**"geo": "[\"124.990437\",\"10.778230\",\"124.990116\",\"10.777913\"]",**

**"imgurl": "https://s3-ap-southeast-1.amazonaws.com/skyeye-multiform/micromappers-sample2/d1f4f5\_d2f1f2\_leyte\_mosaic\_group12637.JPG"**

**},**

**"n\_answers": 5,**

**"quorum": 1,**

**"calibration": 0,**

**"created": "2014-12-11T04:06:33.304045",**

**"app\_id": 45046,**

**"state": "ongoing",**

**"id": 574818,**

**"priority\_0": 0**

**}**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Field Name** | **Type** | **Len** | **M/O** | **Comments/Data Mapping** |
| 1 | **geo** |  |  | M | Image’s boundingbox |
| 2 | **category** |  |  | O | Image URL |
| 3 | **imgurl** |  |  | M | Image URL |
| 4 | **mediaSize** |  |  | M | Image size |

### Output Data example

{

"taskid": 574818,

"url": "https://s3-ap-southeast-1.amazonaws.com/skyeye-multiform/micromappers-sample2/d1f4f5\_d2f1f2\_leyte\_mosaic\_group12637.JPG",

"imgurl": "https://s3-ap-southeast-1.amazonaws.com/skyeye-multiform/micromappers-sample2/d1f4f5\_d2f1f2\_leyte\_mosaic\_group12637.JPG",

"locationRef": null,

"loc": [

{

"layerType": "polygon",

"layer": {

"type": "Feature",

"properties": {},

"geometry": {

"type": "Polygon",

"coordinates": [

[

[

124.99016024172306,

10.778168043677463

],

[

124.99019645154478,

10.778204932149729

],

[

124.99021790921688,

10.778188464082318

],

[

124.99020852148531,

10.77815355177642

],

[

124.99017231166363,

10.778150916885258

],

[

124.99016024172306,

10.778168043677463

]

]

]

}

}

},

{

"layerType": "polygon2",

"layer": {

"type": "Feature",

"properties": {},

"geometry": {

"type": "Polygon",

"coordinates": [

[

[

124.99025478959084,

10.778162773895351

],

[

124.99024607241152,

10.778147623271245

],

[

124.99025210738182,

10.778122591803655

],

[

124.99029368162154,

10.778118639466477

],

[

124.99031245708466,

10.778143012211576

],

[

124.9903104454279,

10.778166726231957

],

[

124.99025478959084,

10.778162773895351

]

]

]

}

}

}

],

"geo": "[\"124.990437\",\"10.778230\",\"124.990116\",\"10.777913\"]"

}

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Field Name** | **Type** | **Len** | **M/O** | **Comments/Data Mapping** |
| 1 | **geo** |  |  | M | Image’s boundingbox |
| 2 | **LayerType** |  |  | M | Object classification  e.g.  - polygon : health coconut tree  - polygon2 : destroyed coconut tree |
| 3 | **Layer** |  |  | M | geojson |
| 4 |  |  |  | M |  |

## UI/UX functional

### UI prototype

### Color schema, outline info.

Aerial Clicker Mobile version is an extension of Clickers.micromappers.org. Therefore, its header/footer/ color schema should follow clickers.micromappers.org.

## Non-functional

### Security

| **ID** | **Requirement** | **Source** | **Cat** |
| --- | --- | --- | --- |
| .1 |  |  |  |

### QA/Testing

| **ID** | **Use Case** | **Date/Status** |
| --- | --- | --- |
| .1 |  |  |

# Issues/Questions

| **Issue #** | **Issue/Resolution Description** | **Date/Status** |
| --- | --- | --- |
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# Revision History

Changes to the text of this document are indicated by bars in the outside margin adjacent to the affected text.

| **Date** | **Change Description** |
| --- | --- |
| Dec. 15. 2014 | Initial draft. |
| Jan. 04, 2014 | Updated aerial clicker choice json property |
|  |  |
|  |  |