User Guide of Google Camera on Android devices

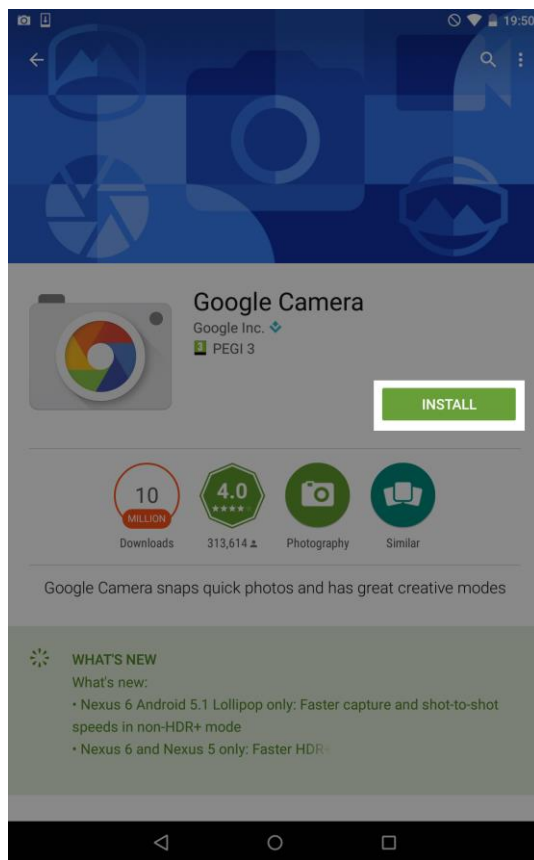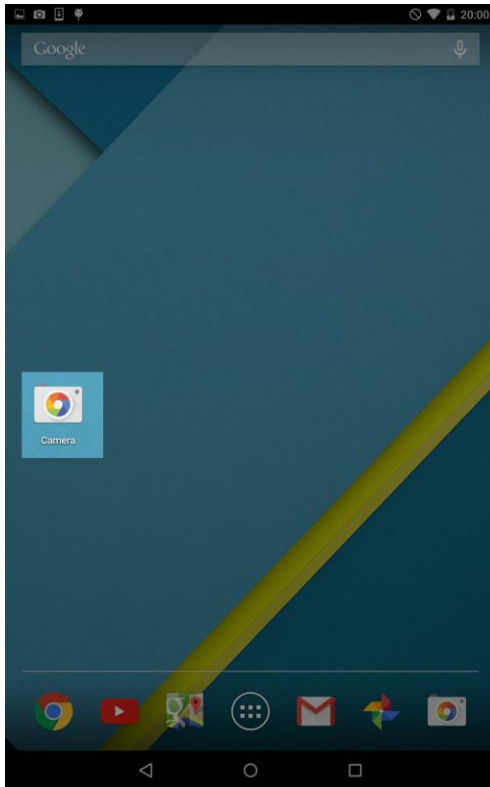## Table of Contents

1. Download

Click the following link and allow opening with Google Play Store. Alternatively, open Google Play Store and search Google Camera. Then install Google Camera produced by Google Inc.

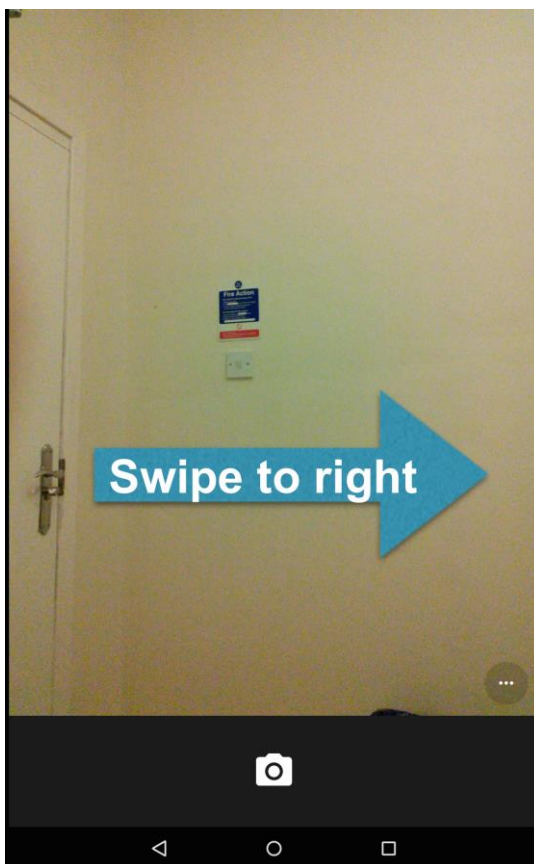https://play.google.com/store/apps/details?id=com.google.android.GoogleCamera&hl=en_GB
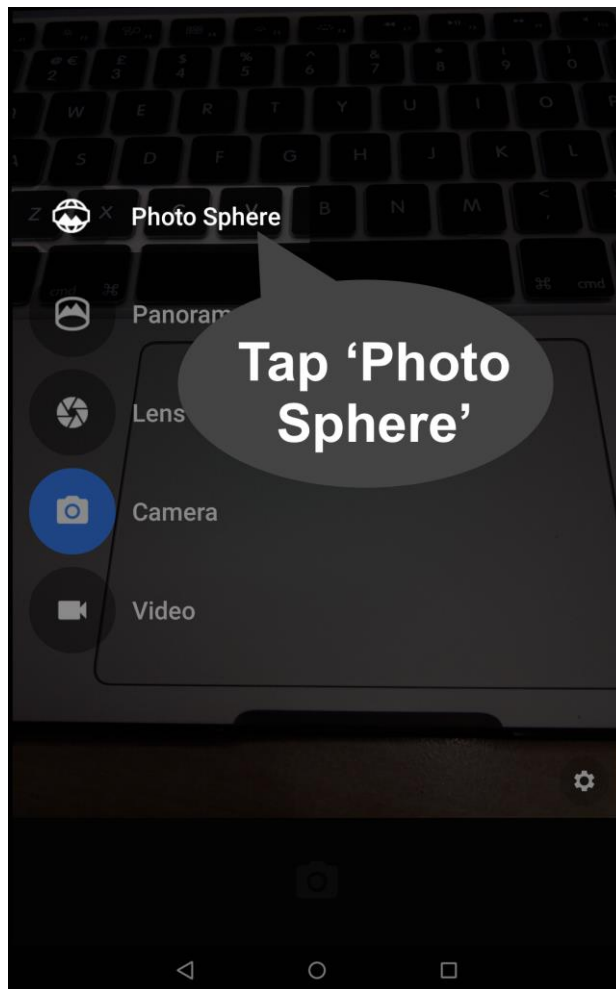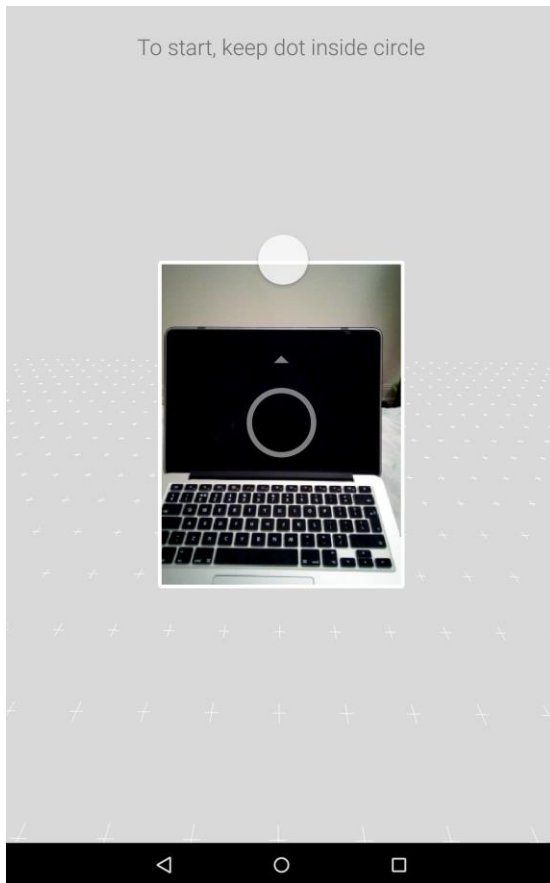

2. Create a photosphere

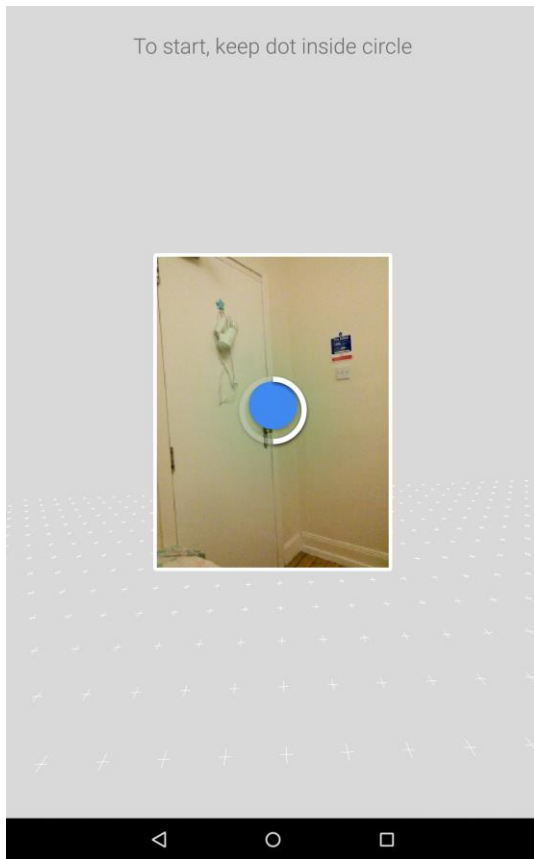a) Open Google Camera

b) Slide left to right on the screen


c) Select 'Photo Sphere'

d) Hold the mobile device in vertically, and there is a white dot in the screen

e) Move the mobile device slowly to catch the dot inside circle. Once the dot is close to the circle, the dot turns into blue, and hold the device at that position for several seconds

f) Hold the device with the same angle. Rotate the mobile device slowly to catch the every dot into circle
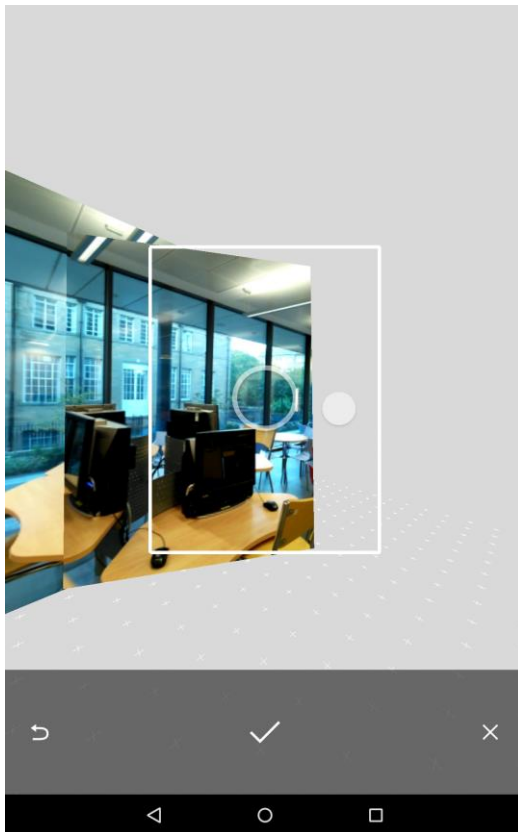
g) Keep the device in the same position and modify the angle. Repeat step e and step f, until there is no dot
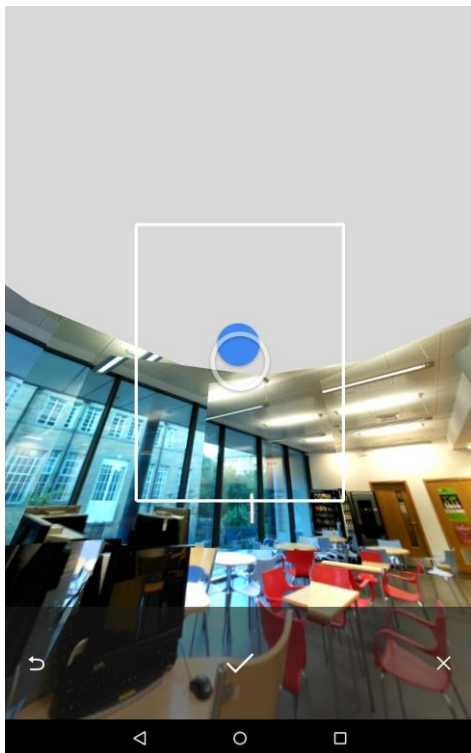
h) Once there is no dot, it will process the photosphere automatically by using

these photos. The start page will pop up, and the photosphere will be stored in memory. Alternatively, tap the tick at the center bottom of the screen.
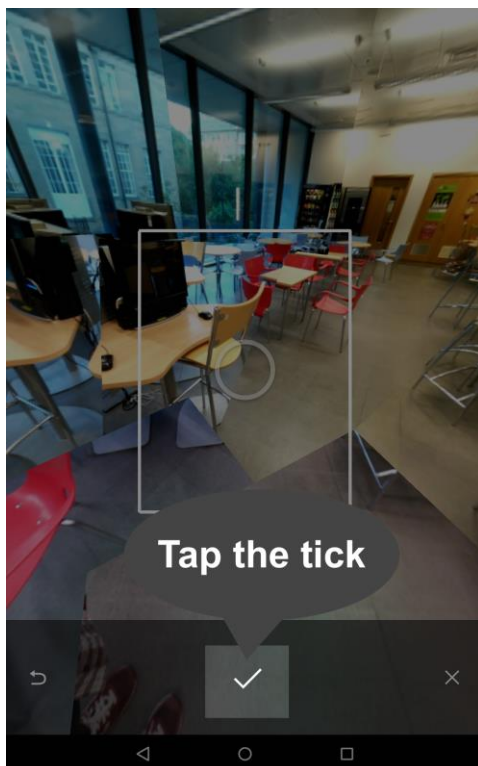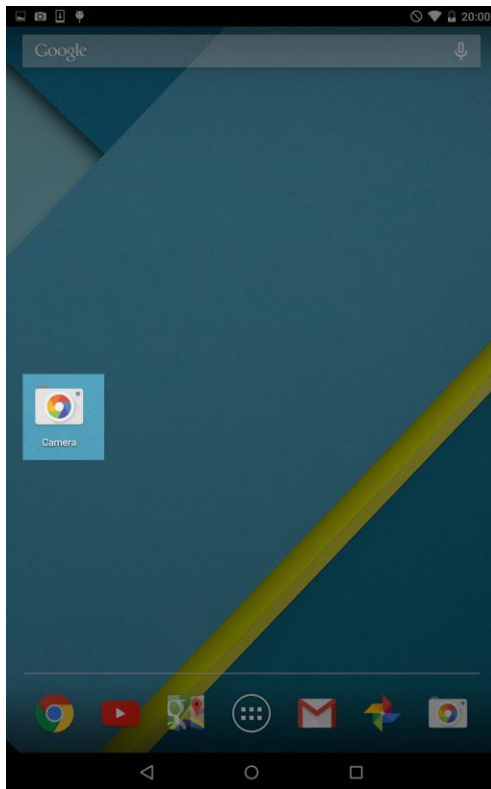

3. View a photosphere

Download Google Photos from Google Play Store. The following is the download link. Alternatively, open Google Play Store and search Google Photos created by Google Inc.
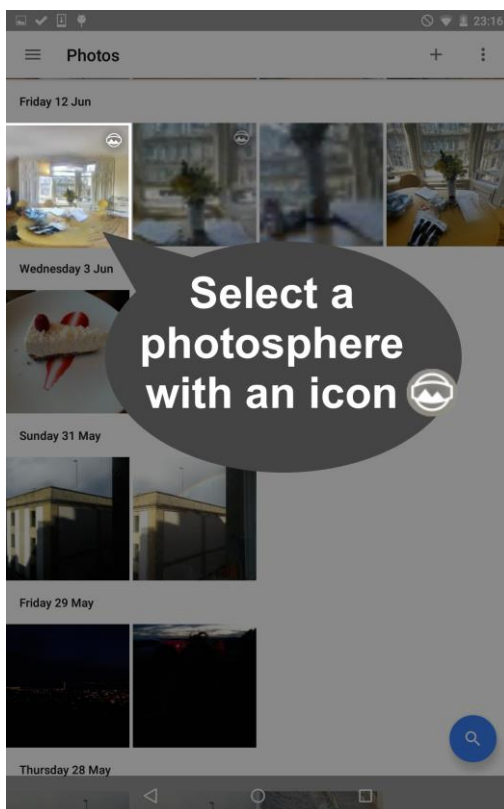
https://play.google.com/store/apps/details?id=com.google.android.apps.photos&hl=en
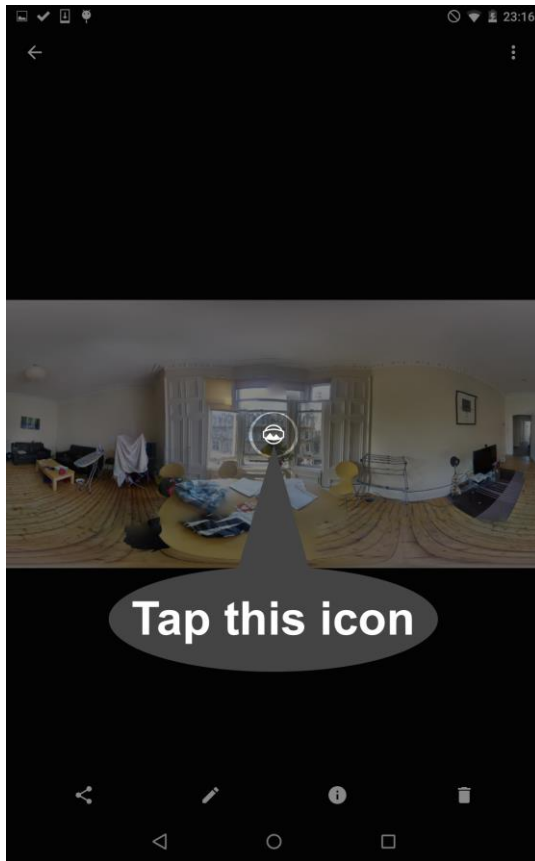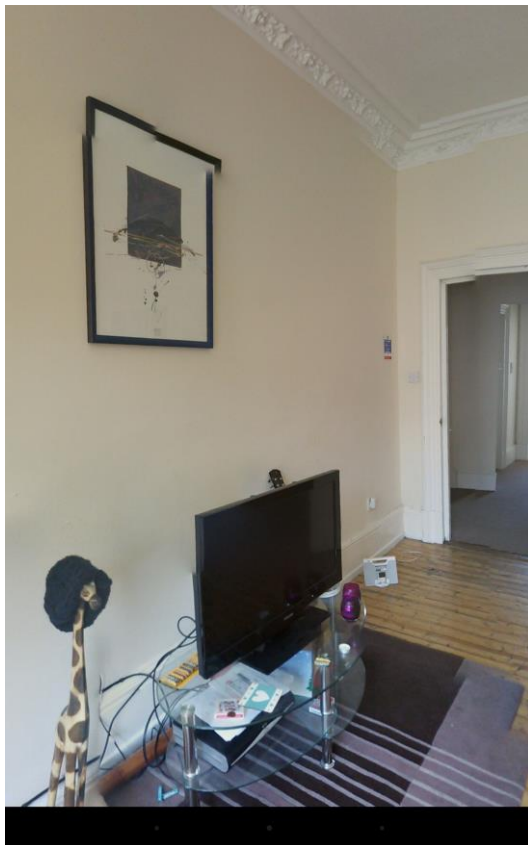
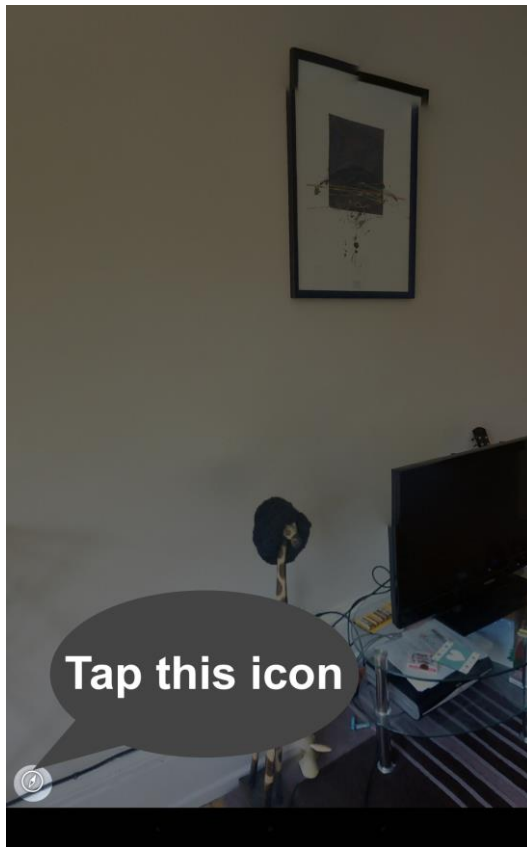a) Open Google Photos

b) Select a photosphere with an icon

c) Tap the icon in the middle of the screen
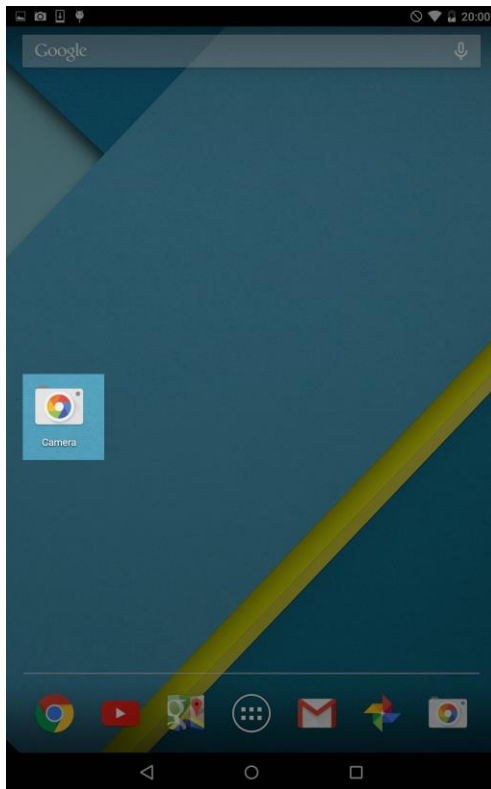
d) View the photosphere by swipe the screen

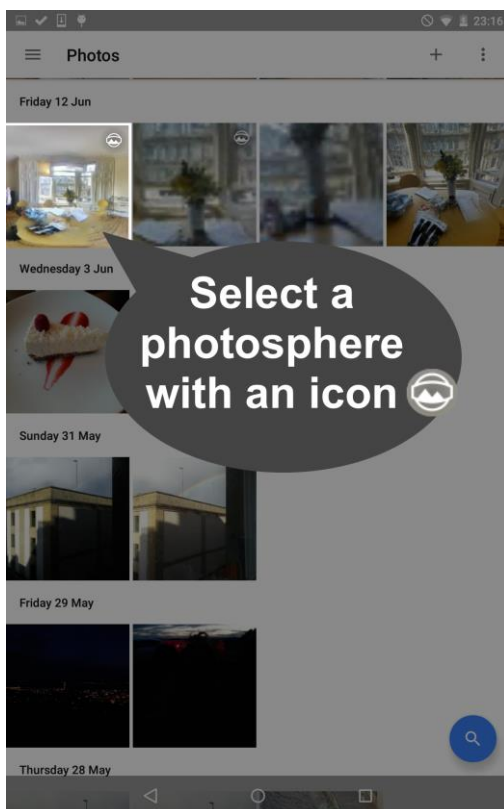e) Tap the screen, and then tap the icon in the bottom left corner

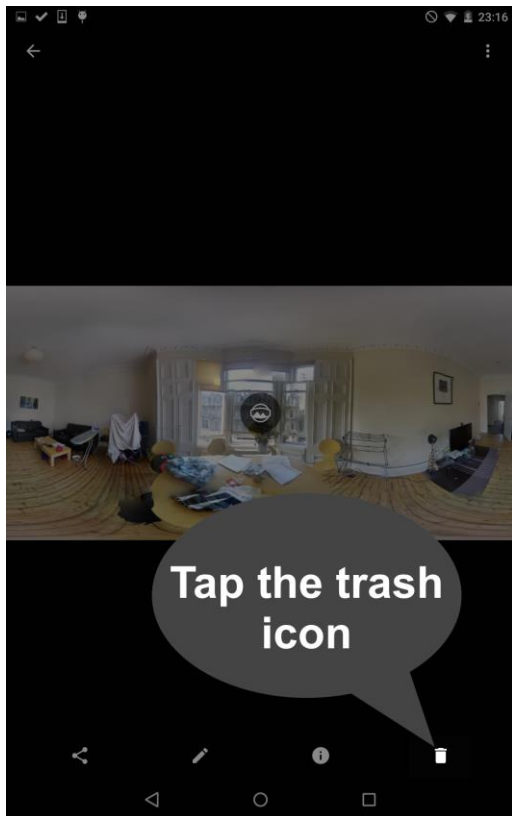f) View the photosphere by holding and moving the device

4. Delete a photosphere

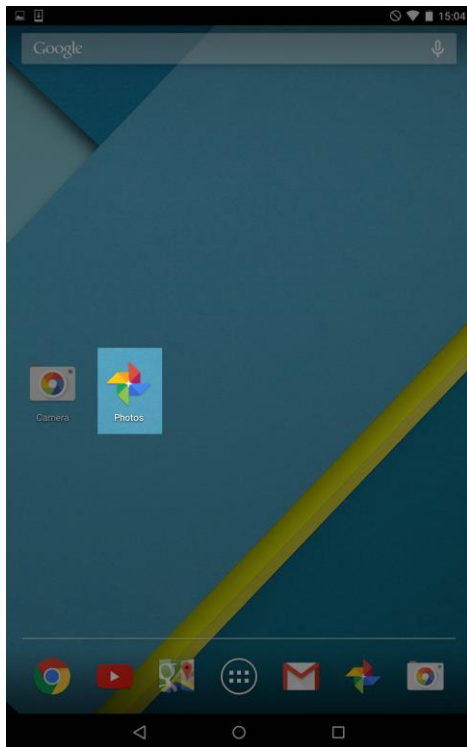a) Open Google Photos

b) Select a photosphere with an icon

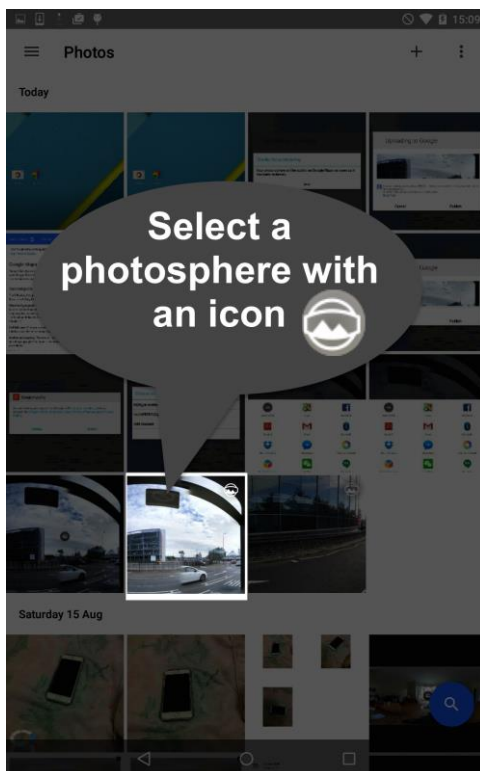c) Tap the trash icon in the bottom right corner of the screen

5. Publish to Google Maps

a) Open Google Photos

b) Select a photosphere with an icon

c) Tap the share icon in the bottom left corner of the corner

d) Select the Google Maps icon

e) Select 'Publish' in the pop up window

f) Click 'Done' in the pop up window
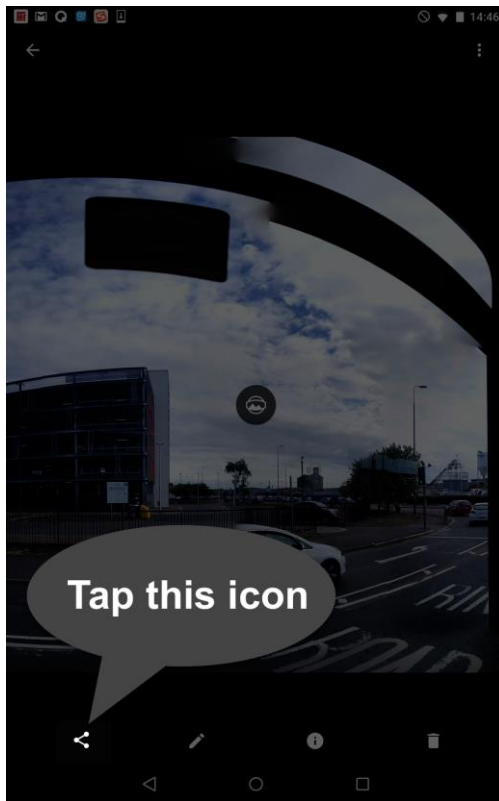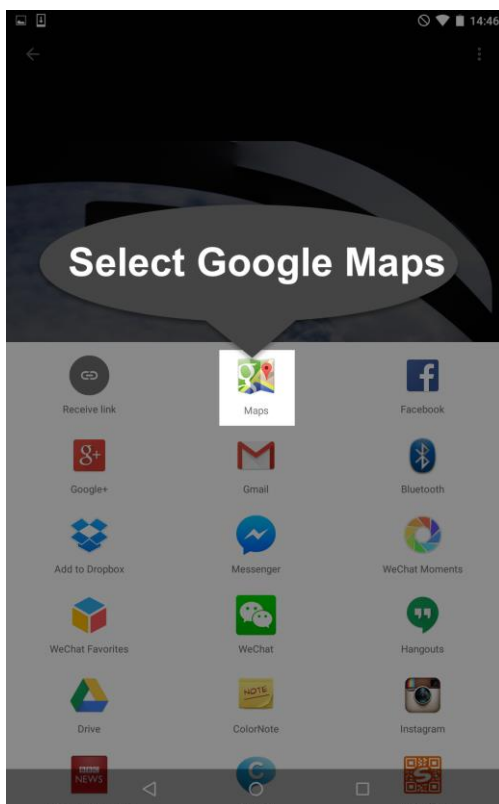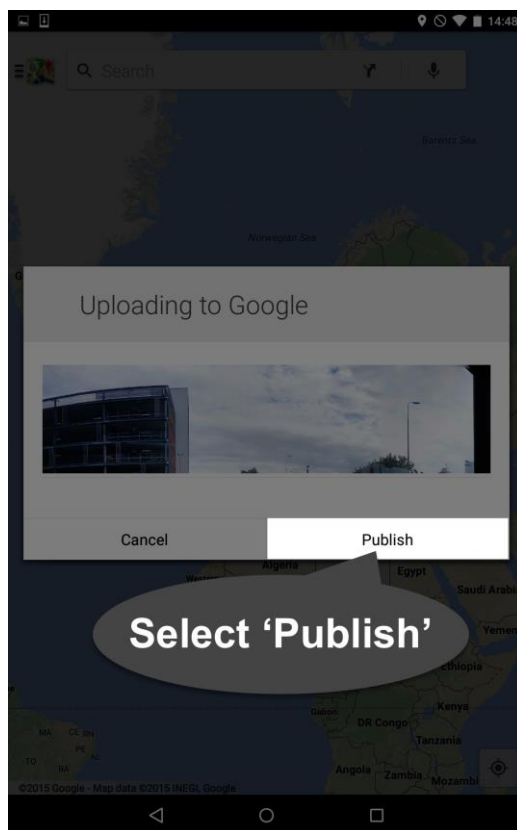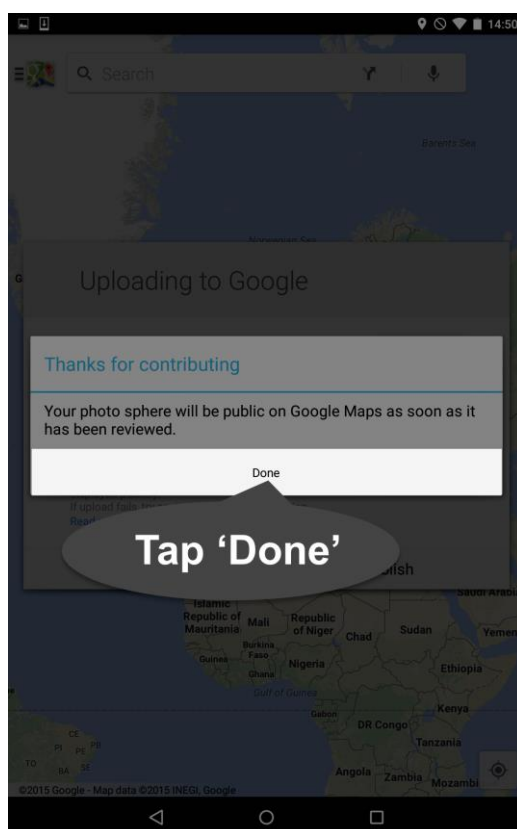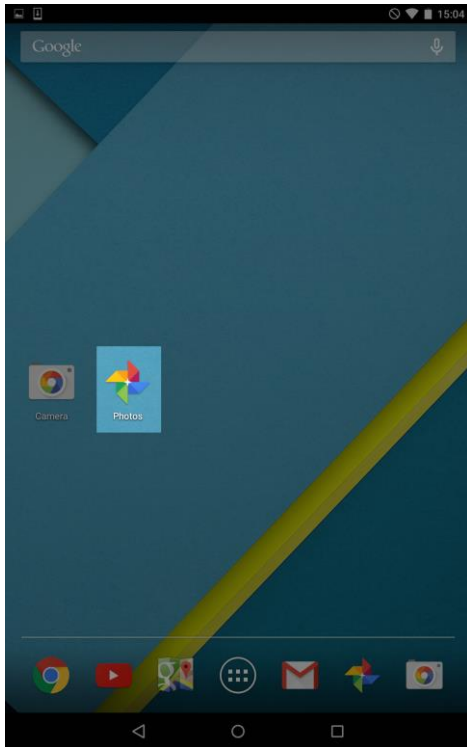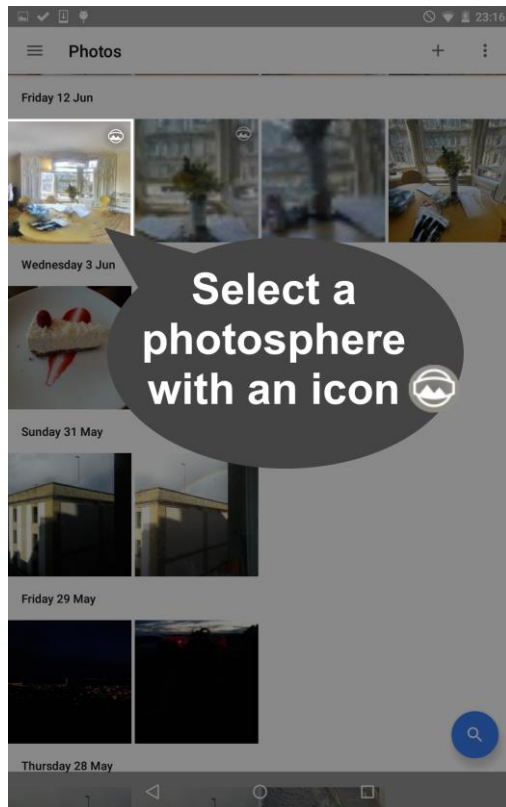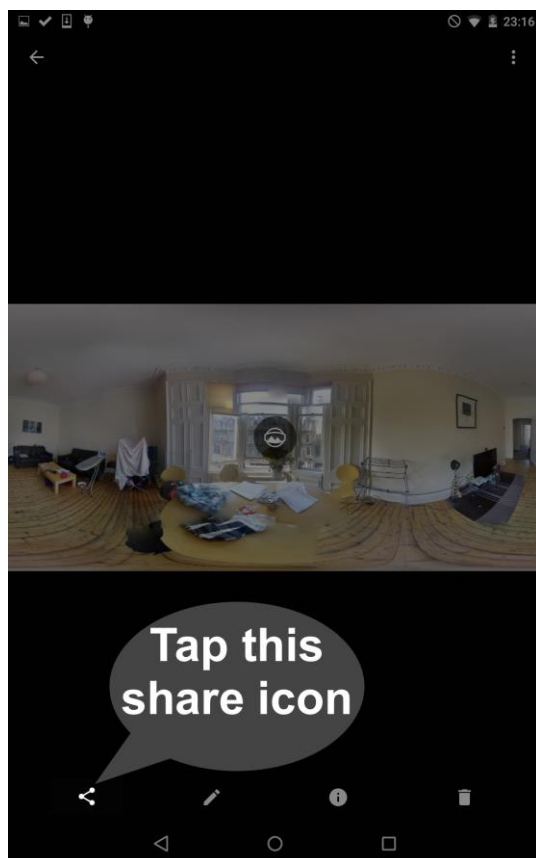
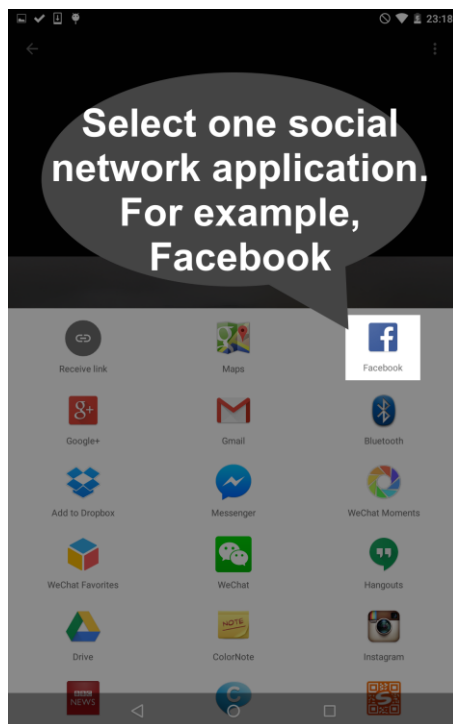# 6. Share a photosphere

a) Open Google Photos

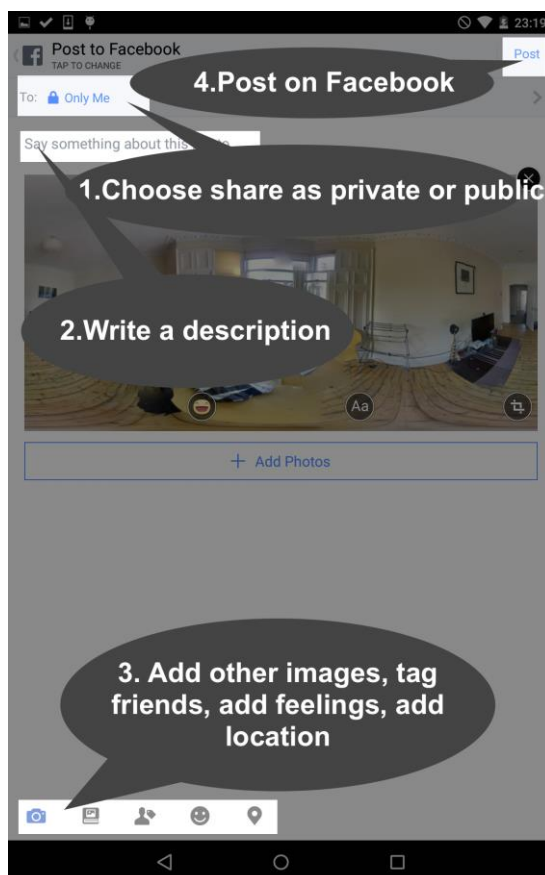b) Select a photosphere with an icon

c) Tap the share icon in the bottom left corner of the corner

d) Select one social network application to share. For example, Facebook

e) Add a description, set features and then tap 'Post' in the upper right corner

7. Upload photospheres on Omeka

Omeka is a platform for presenting collections and exhibitions in library and museums [1]. The following steps describe how to upload a 360-degree panorama on Omeka. You should have an account for Omeka platform. In addition, the photosphere document should be imported from mobile devices to the computer in advance.
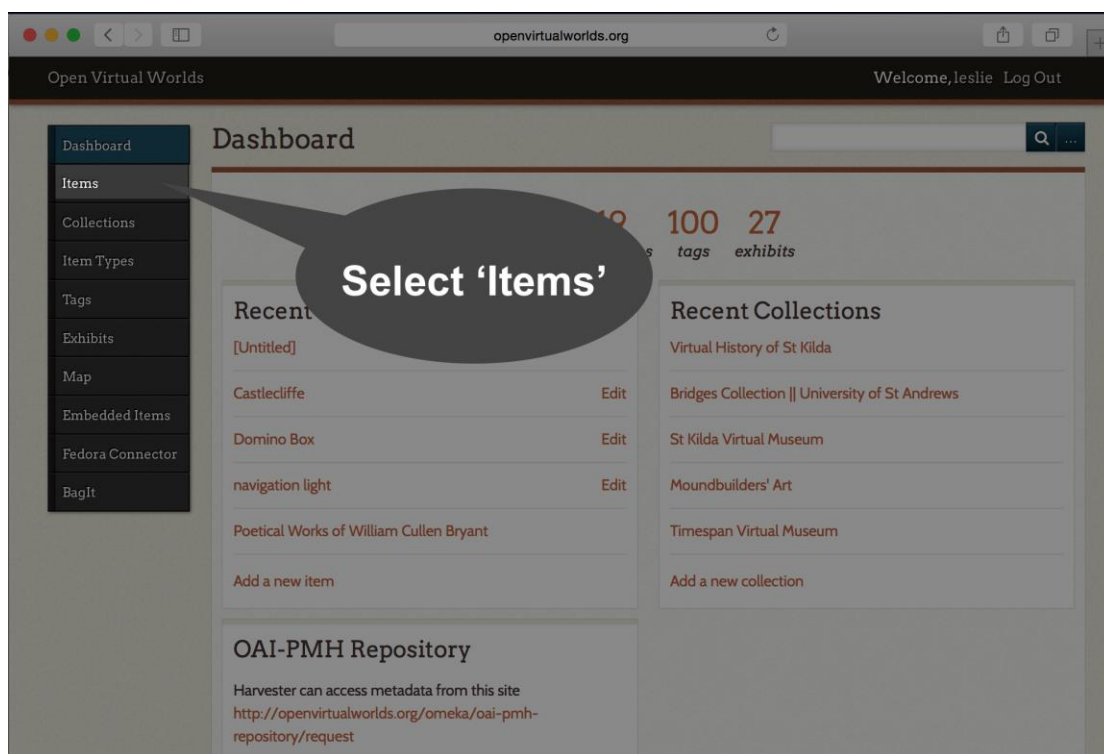
a) Open the system created on Omeka platform, such as Open Virtual Worlds. Log in with username and password. The following is the link to log in

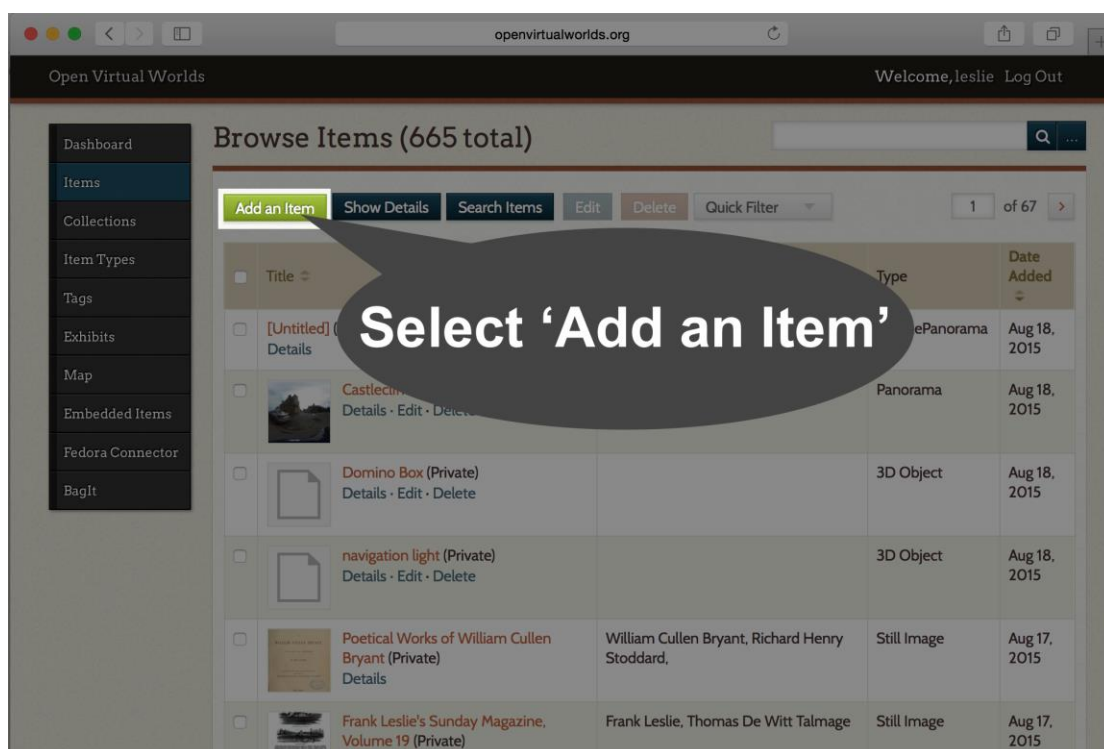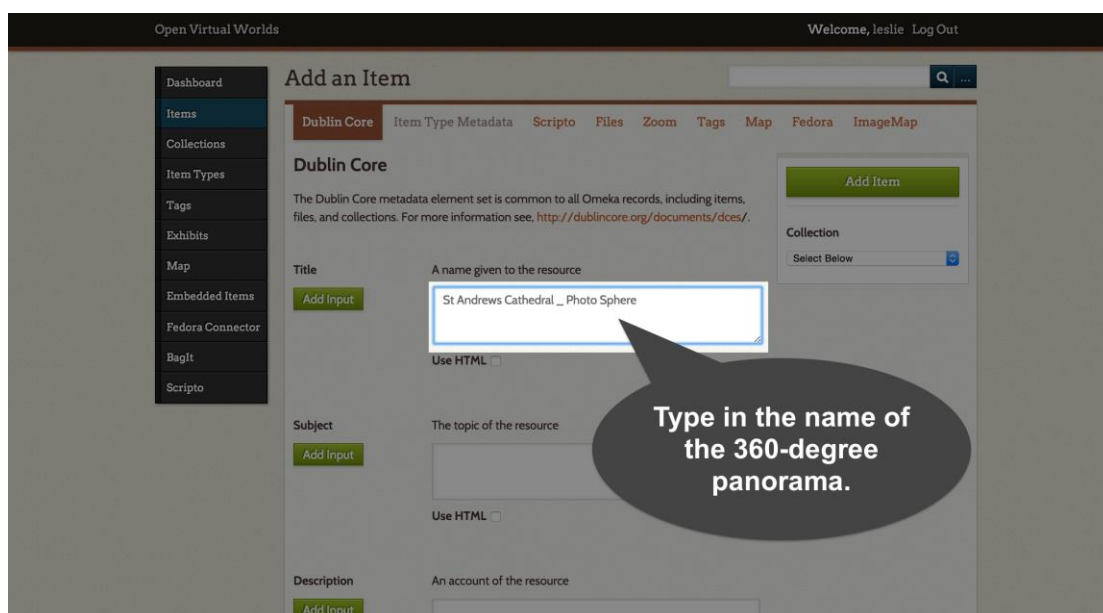http://openvirtualworlds.org/omeka/admin/users/login
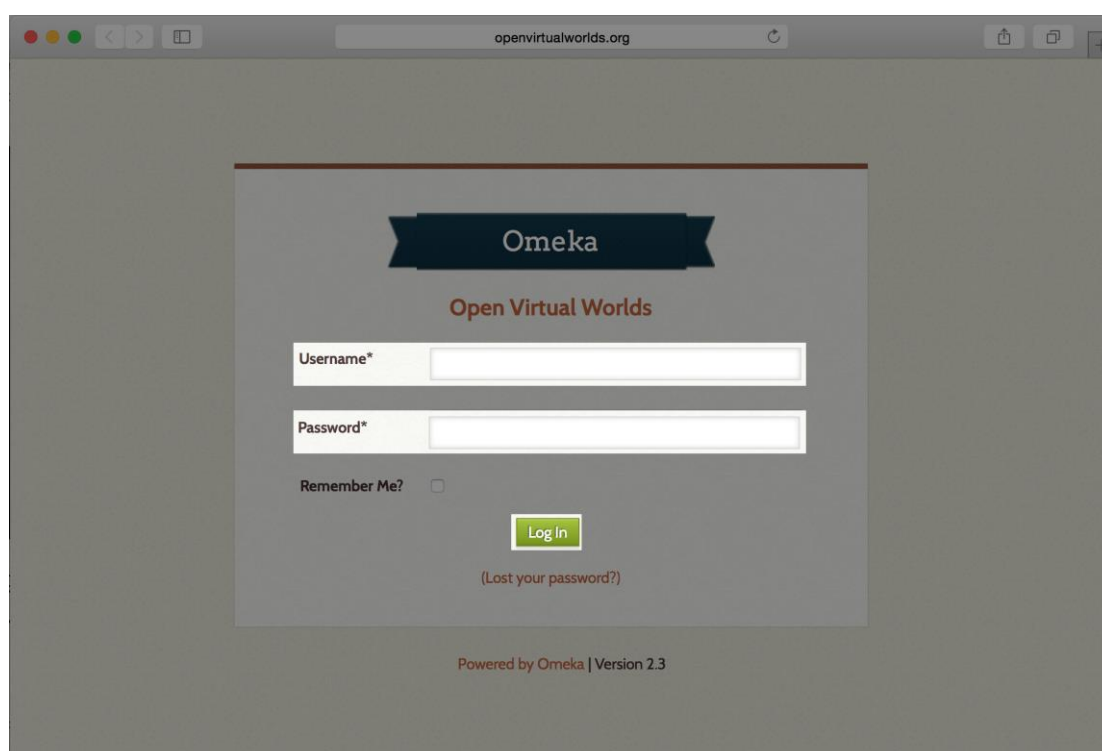
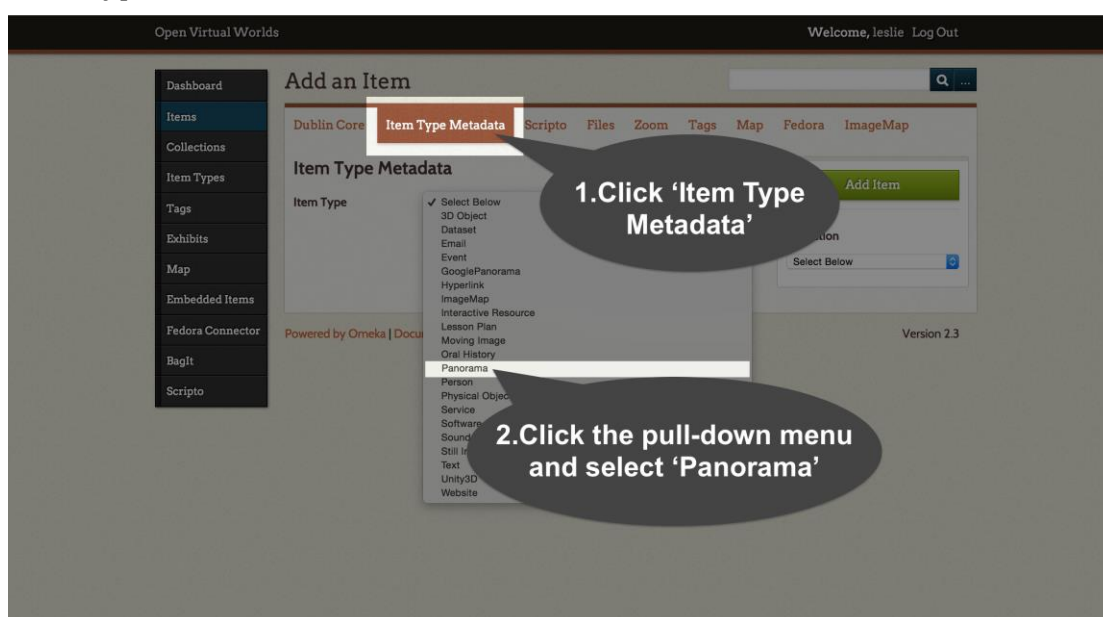b) Select 'Items' on the left side navigation bar
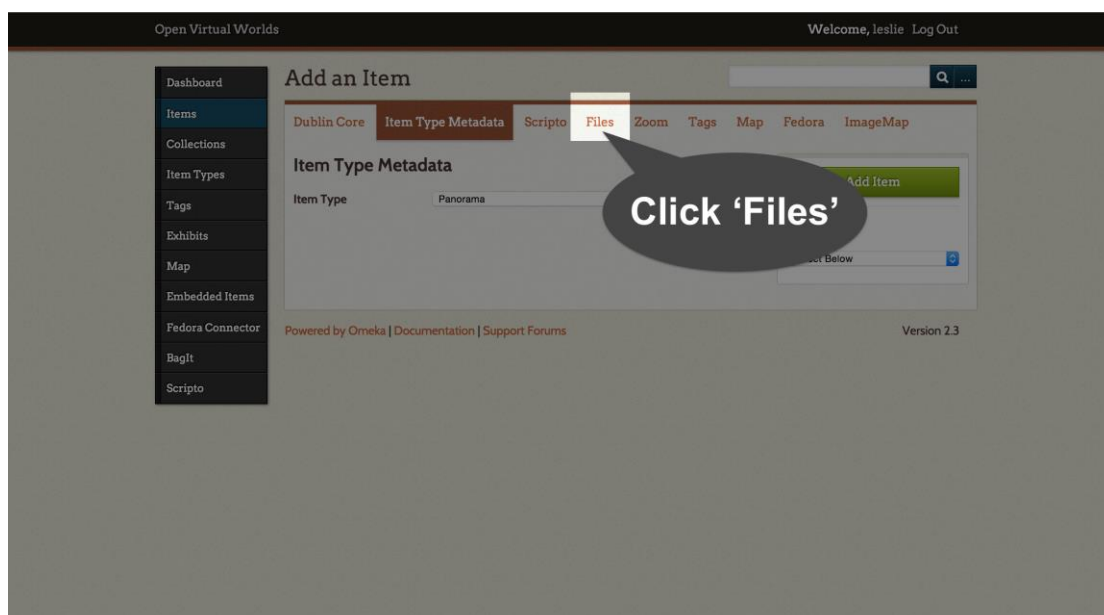
c) Click the button 'Add an Item'

d) Click the button 'Dubin Core' and type in the name of the photosphere. For example, name the photosphere as 'St Andrews Cathedral_Photo Sphere'
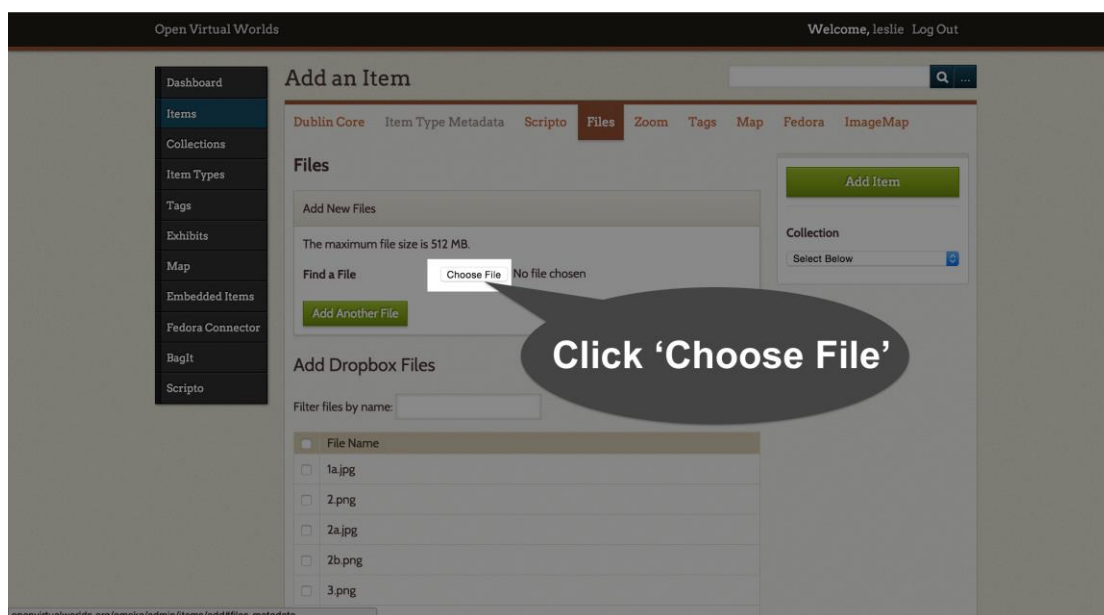
e) Select the button 'Item Type Metadata', and click the pull-down menu beside
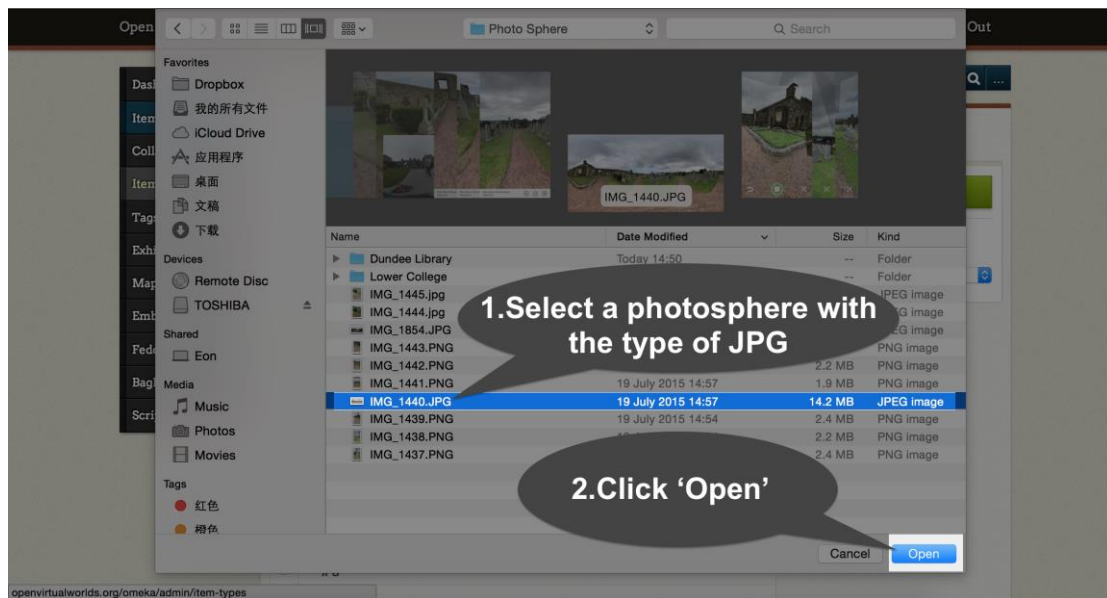   'Item Type', then choose 'Panorama'
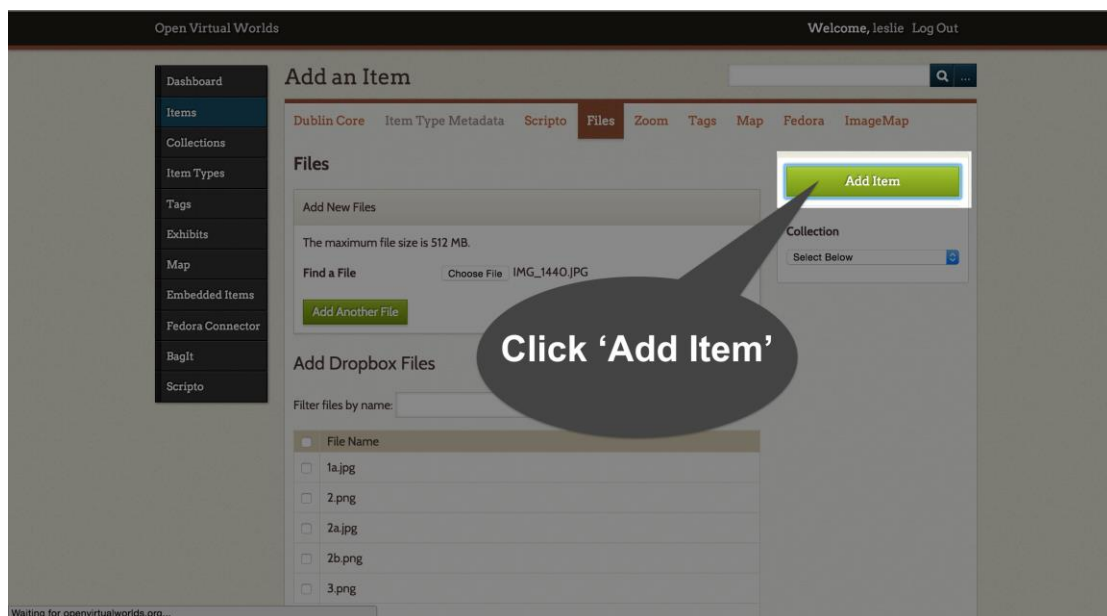

f) Select the button 'Files'

g) Click the button 'Choose File' in the frame

h) Select a panorama from the local direction with the type of 'JPG', then click the button 'Open in the bottom right corner of the pop up window
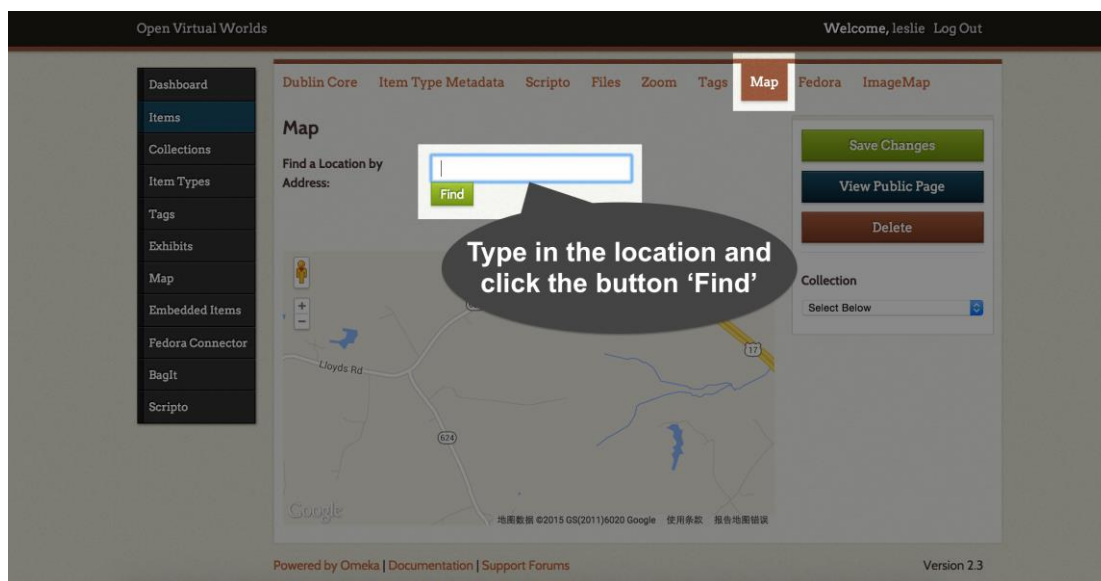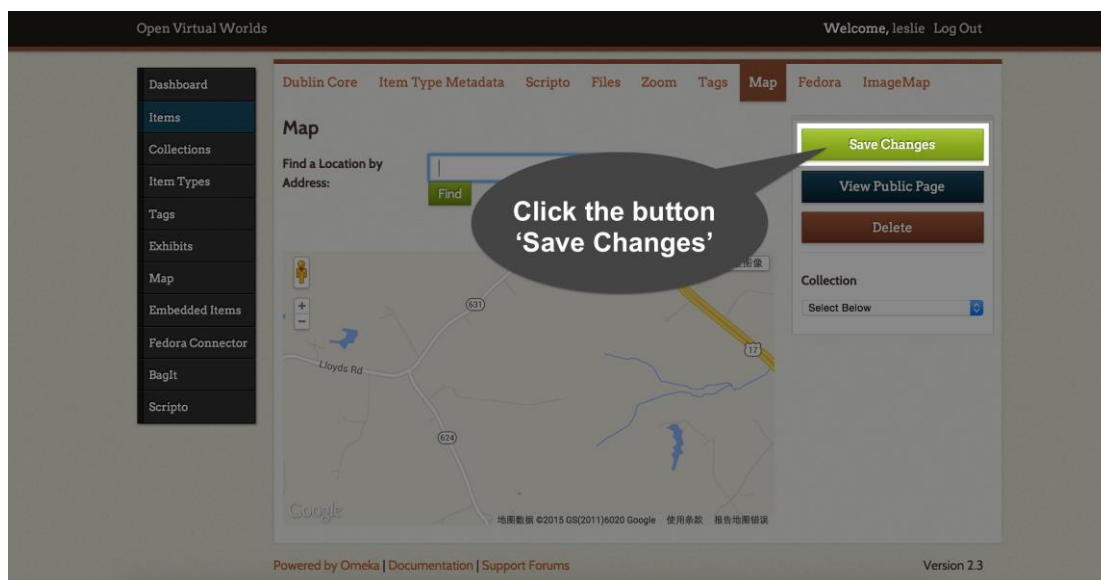
i) Click 'Add Item'

j) Select 'Map' and type in the location of the photosphere. Then click the button 'Find'
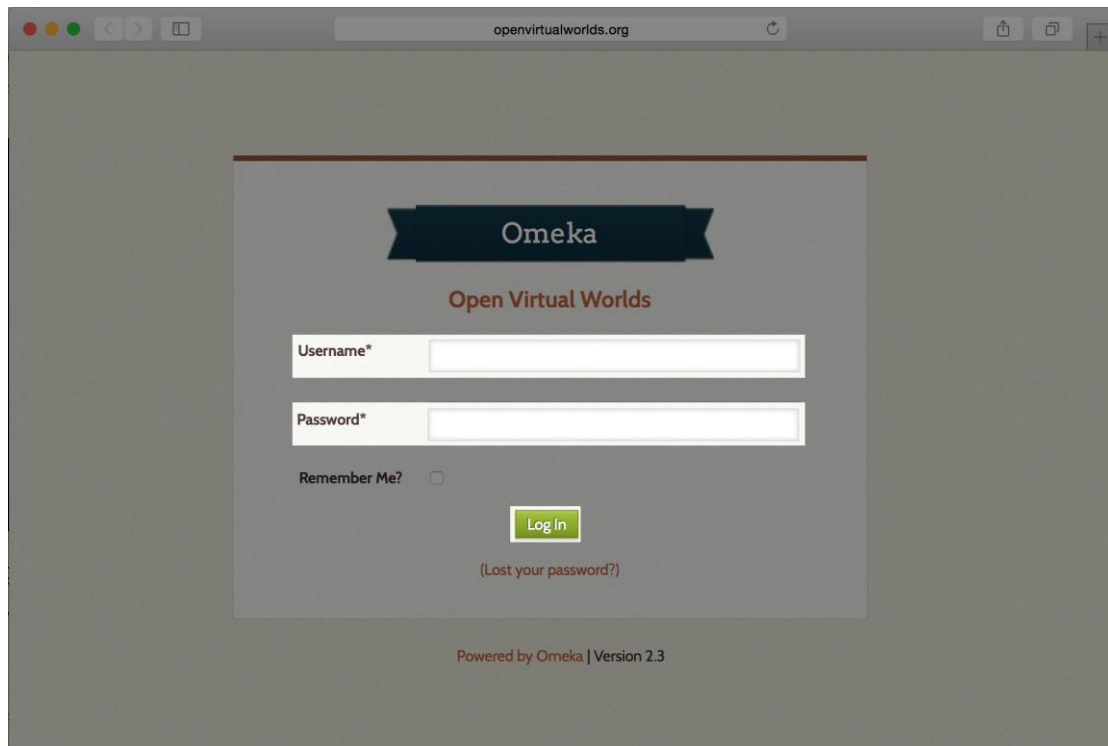
k) Click the button 'Save Changes'

8. View a photosphere on Omeka
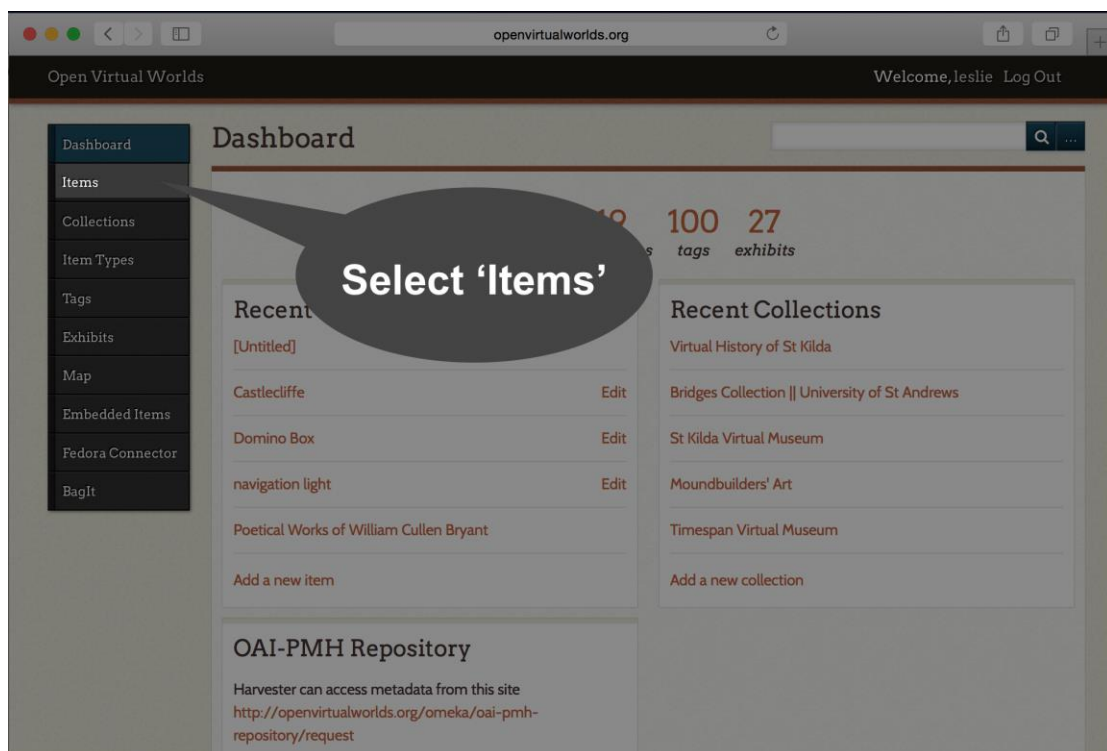
An account for Omeka is necessary.

a) Open the system created on Omeka platform, such as Open Virtual Worlds. Log in with username and password. The following is the link to log in
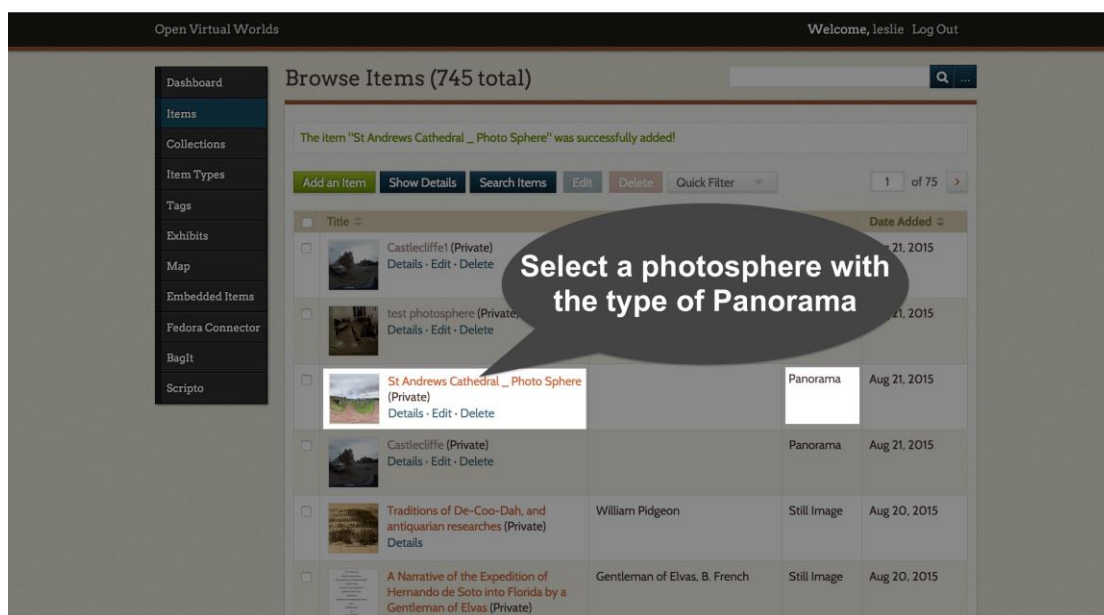
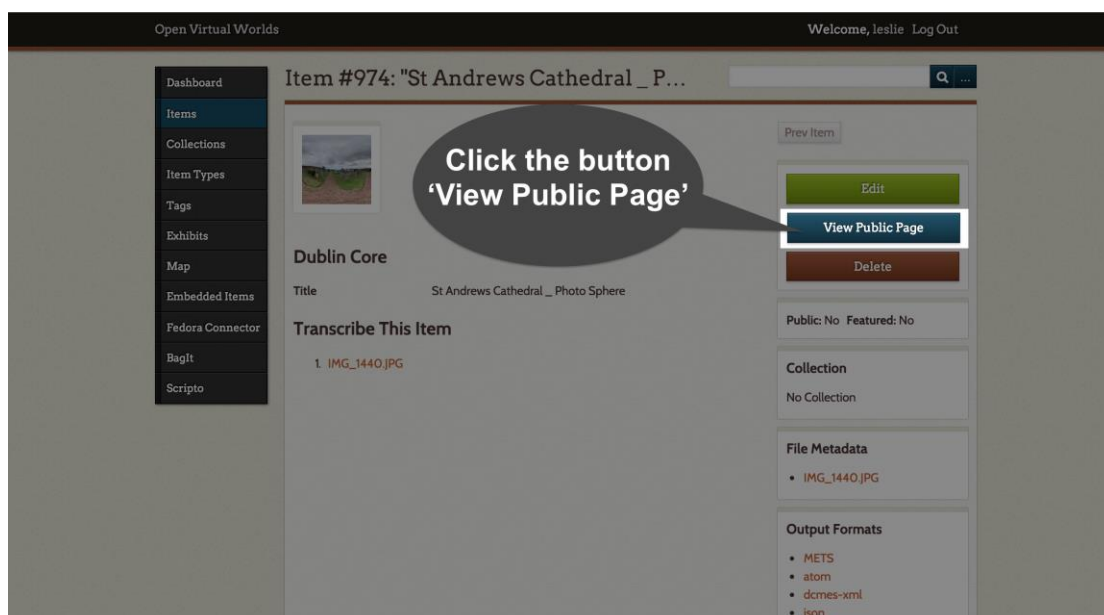http://openvirtualworlds.org/omeka/admin/users/login

b) Select 'Items'
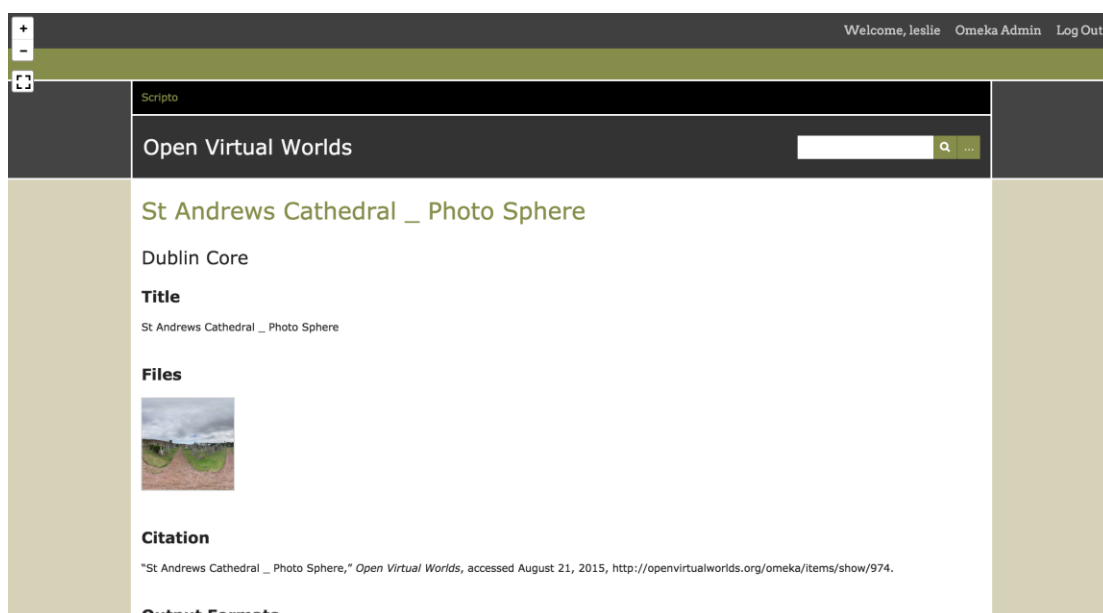

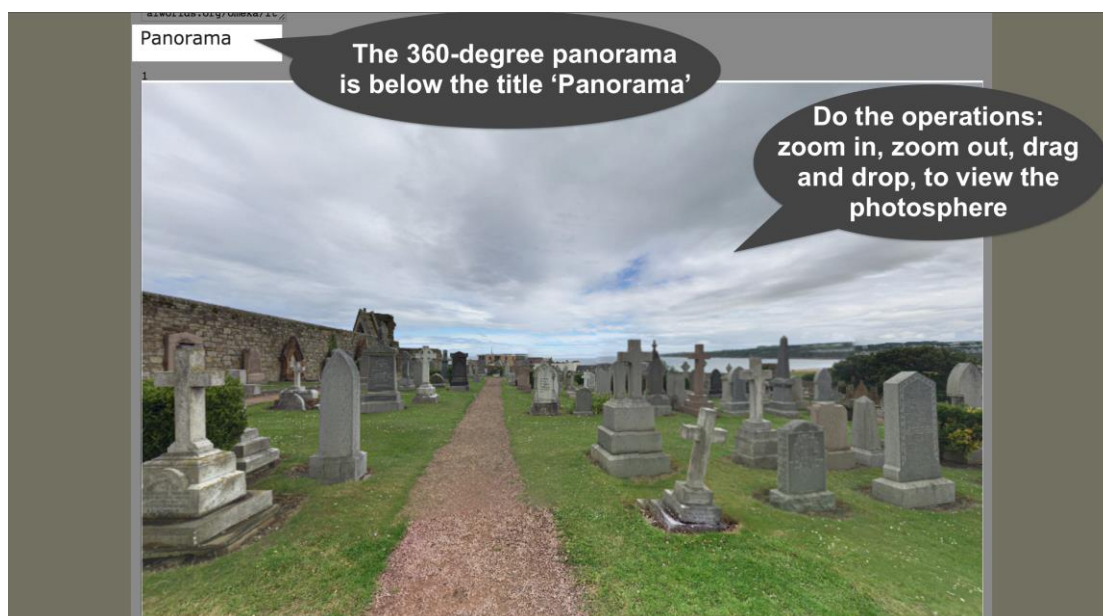
c) Select a photosphere with the type of 'Panorama'

d) Click the button 'View Public Page'

e) The webpage will display like the following screenshot

f) There is a 360-degree panorama below the title 'Panorama' at the end of this webpage. View the photosphere by zooming in/ zooming out and drag/ drop on the frame
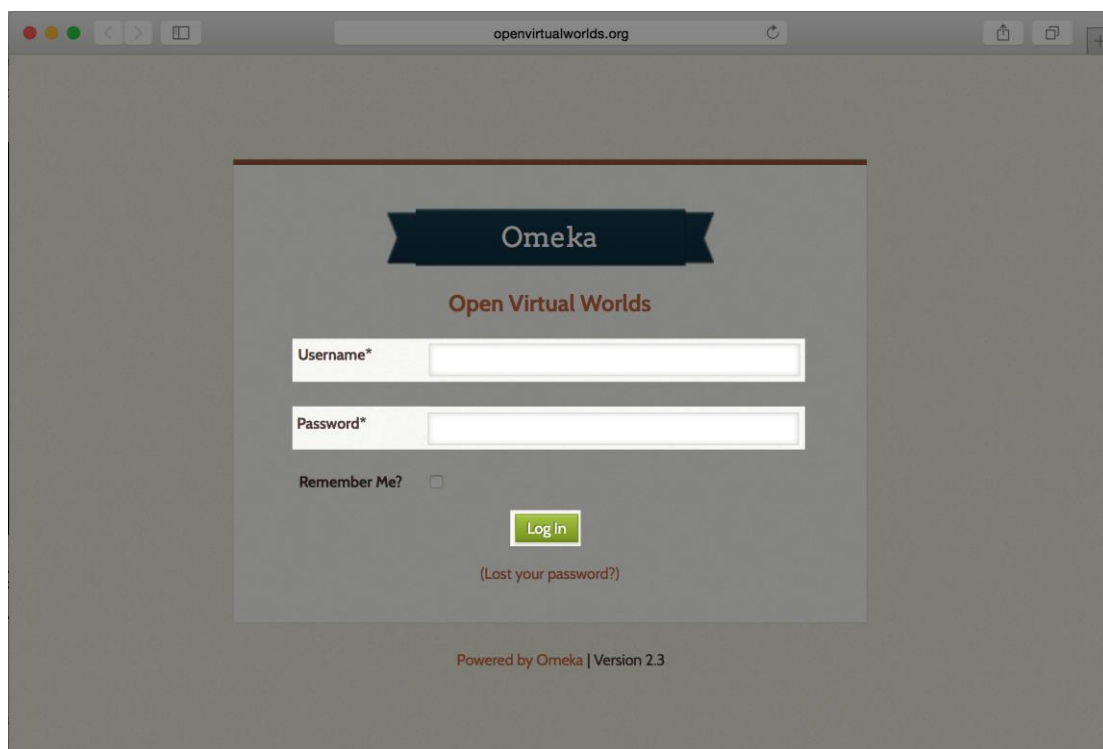

9. Create an Exhibit with photospheres

An account for Omeka is necessary. In addition, items of photospheres should be created before creating an exhibit.
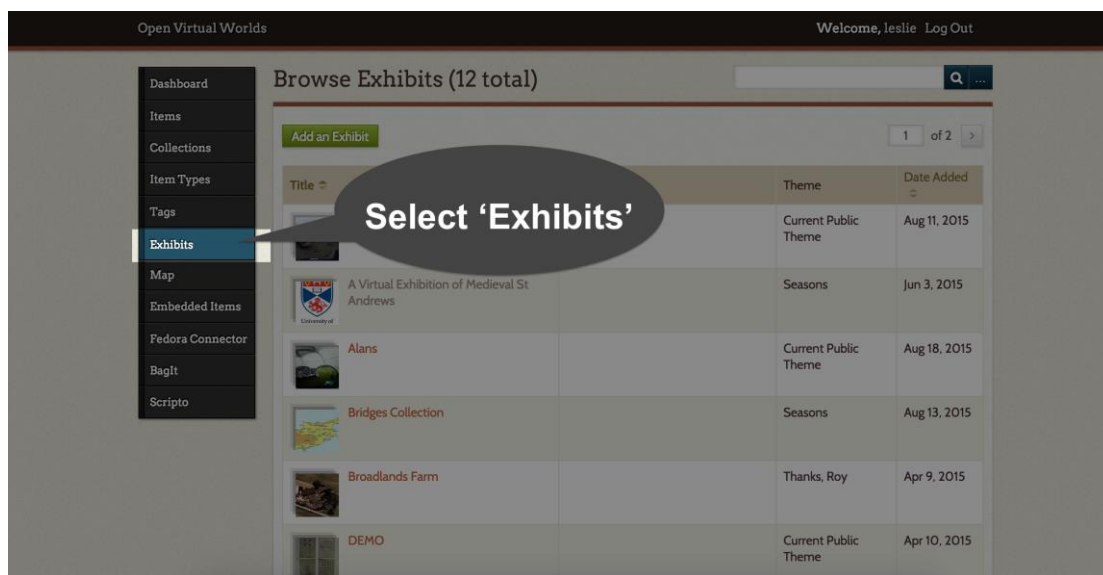
a) Open the system created on Omeka platform, such as Open Virtual Worlds.

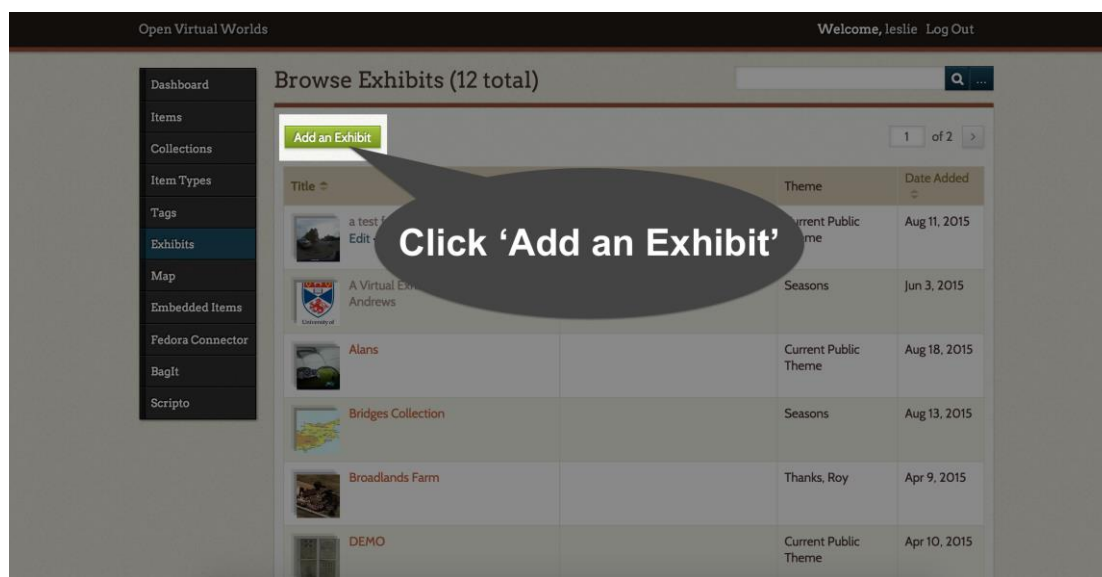Log in with username and password. The following is the link to log in

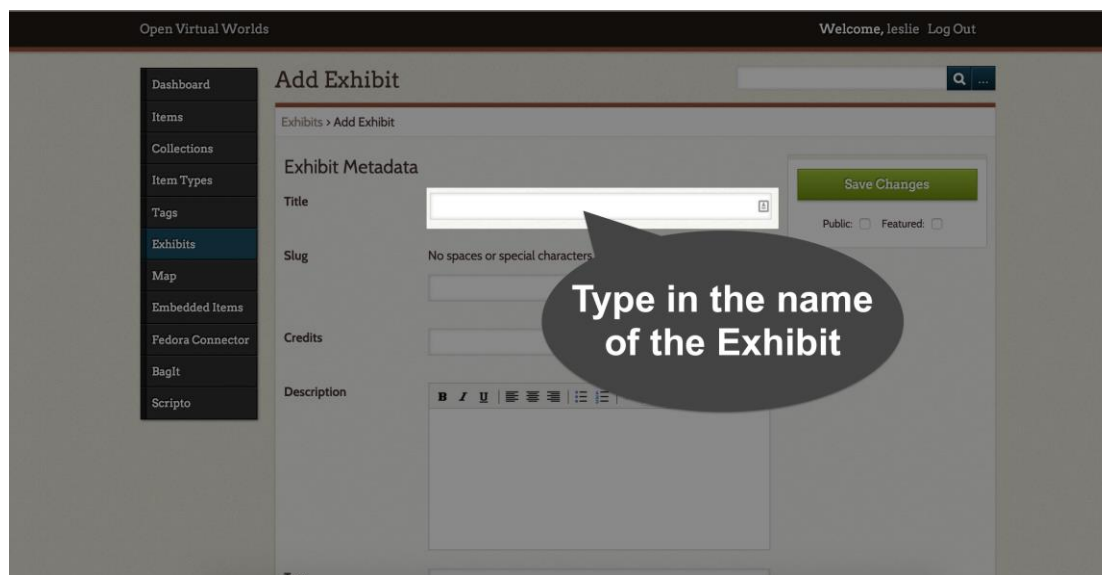http://openvirtualworlds.org/omeka/admin/users/login
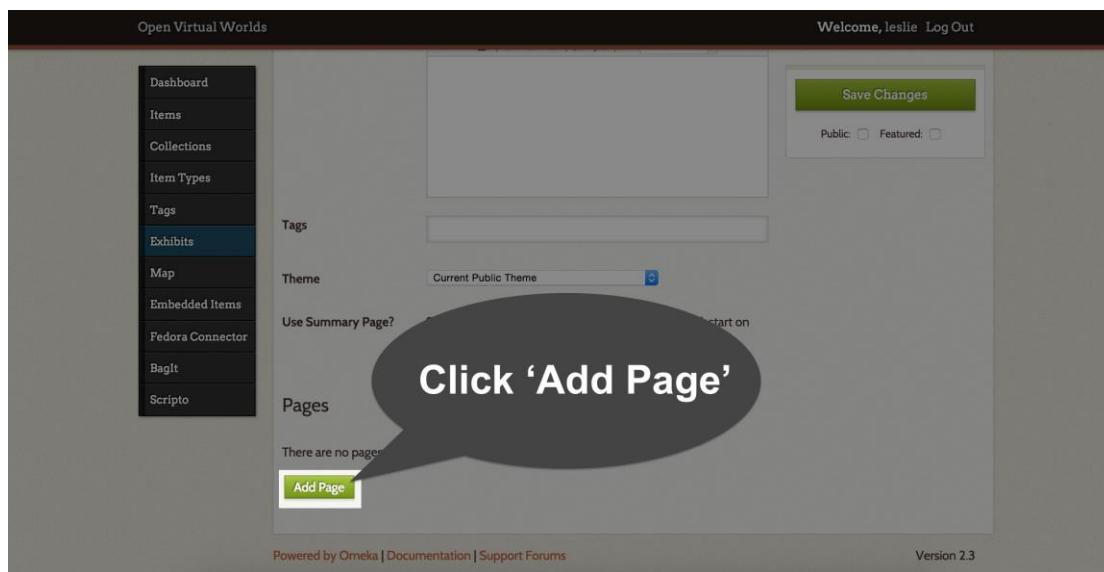

b) Select 'Exhibits'

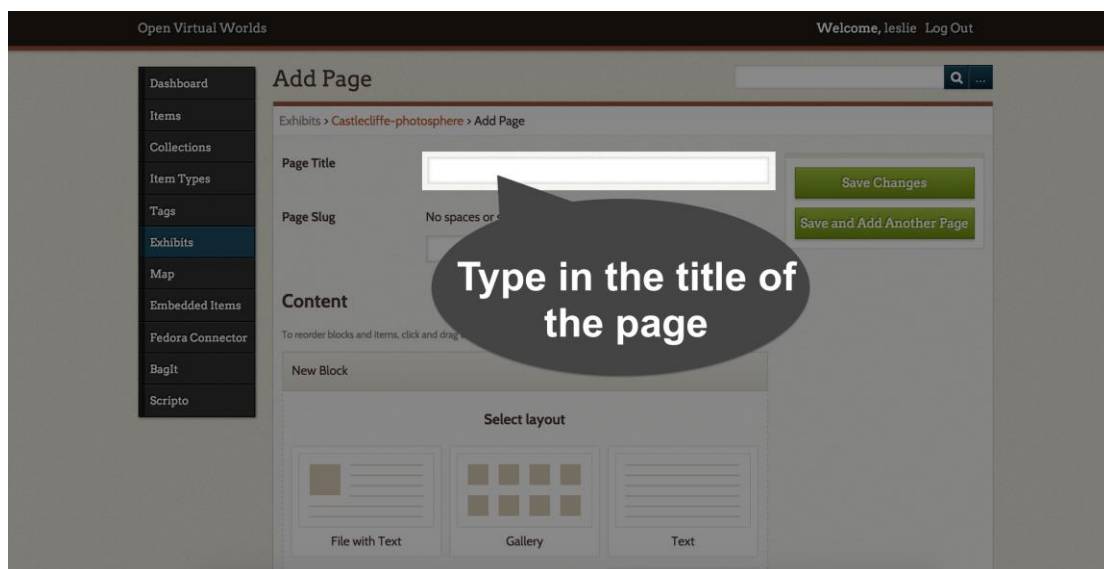c) Click 'Add an Exhibit'

d) Type in the name of the Exhibit

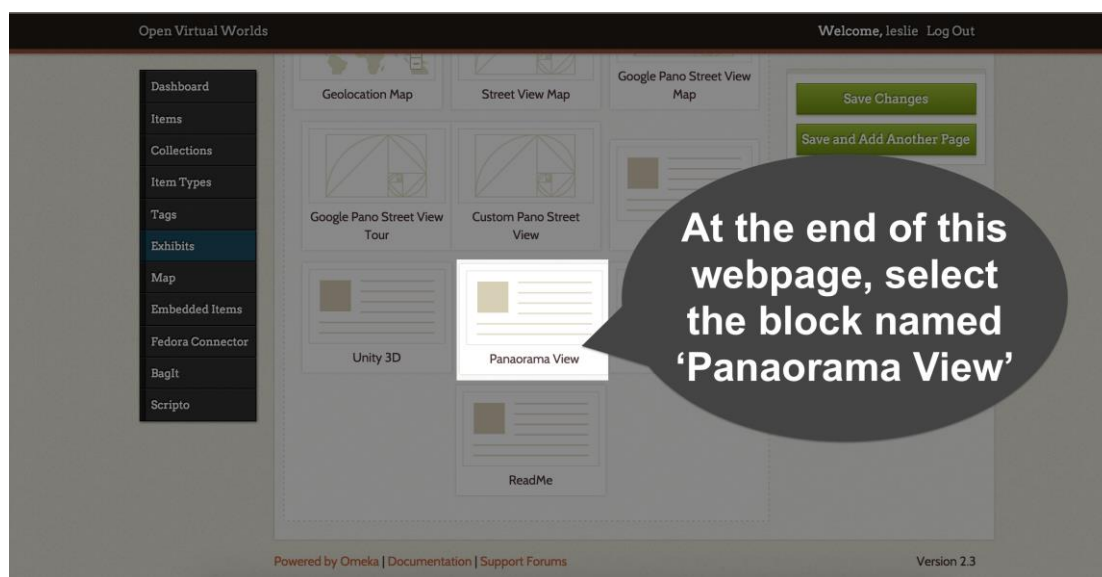e) At the end of the webpage, click 'Add Page'
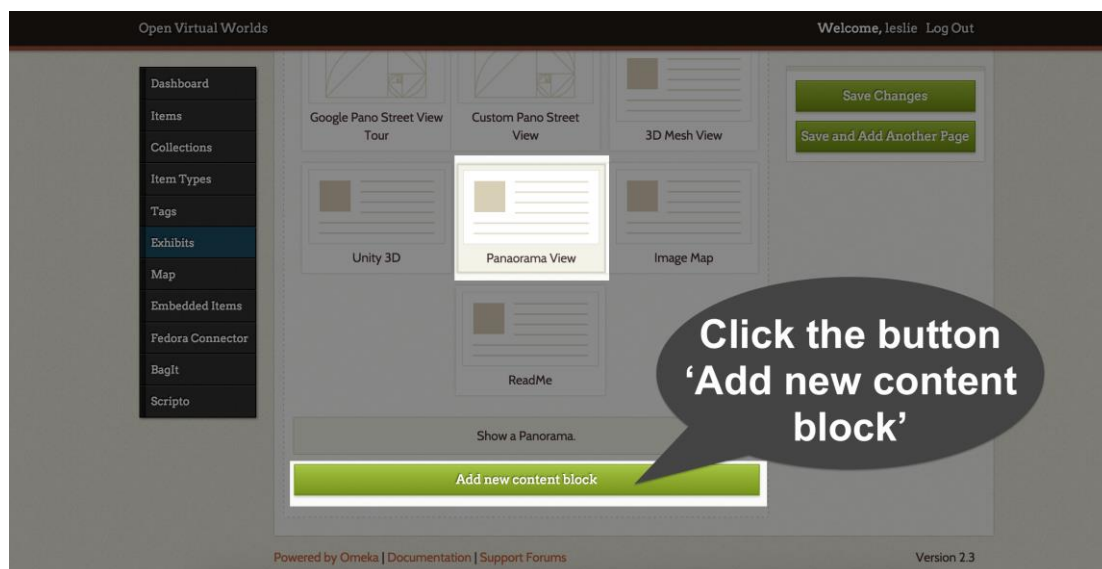
f) Type in the title of the page

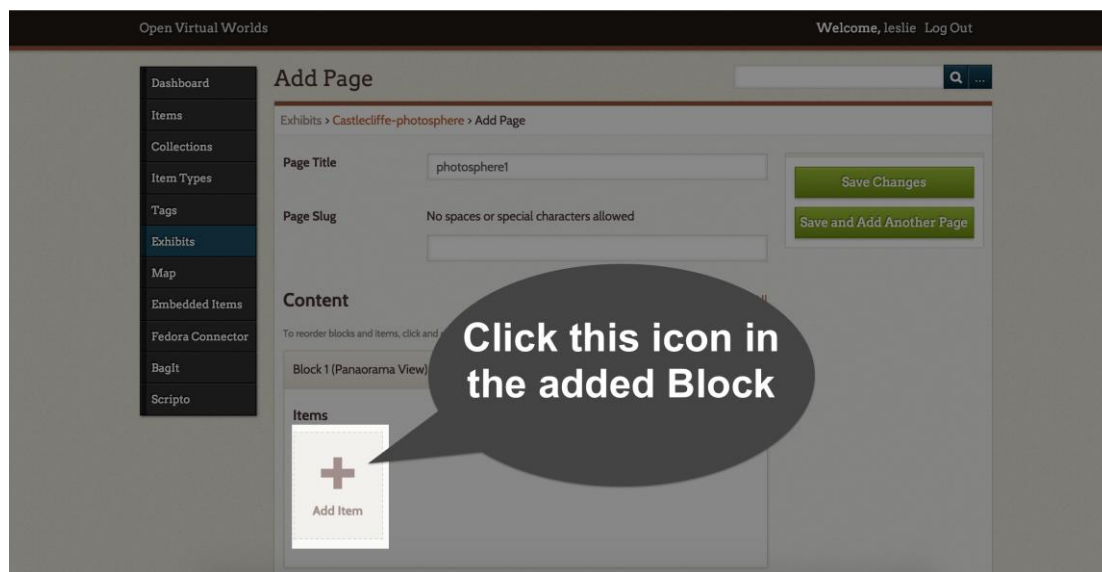g) At the end of this webpage, select the block named 'Panaorama View'

h) Click the button named 'Add new content block'
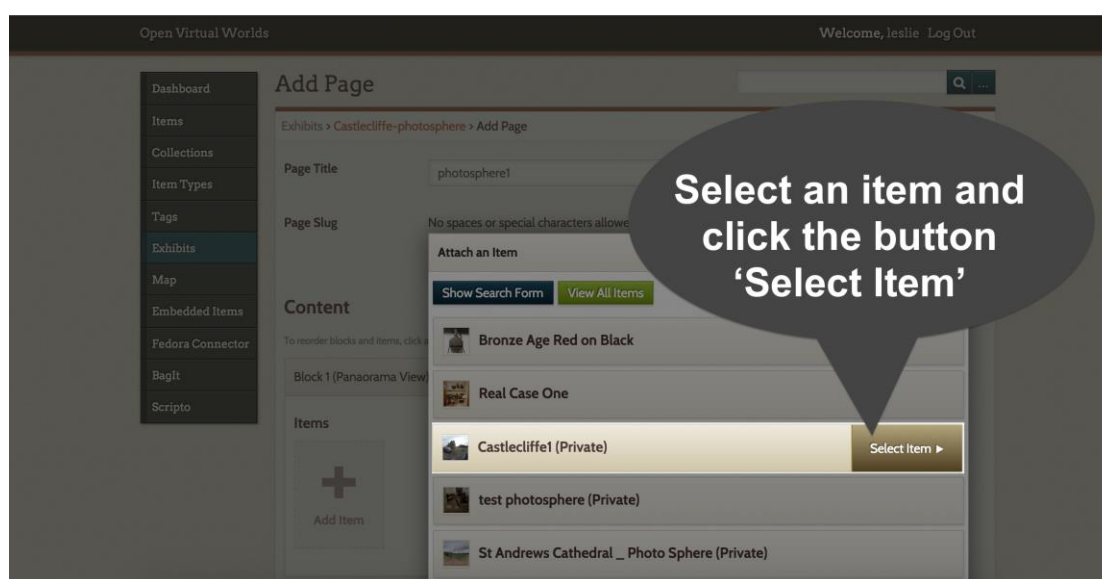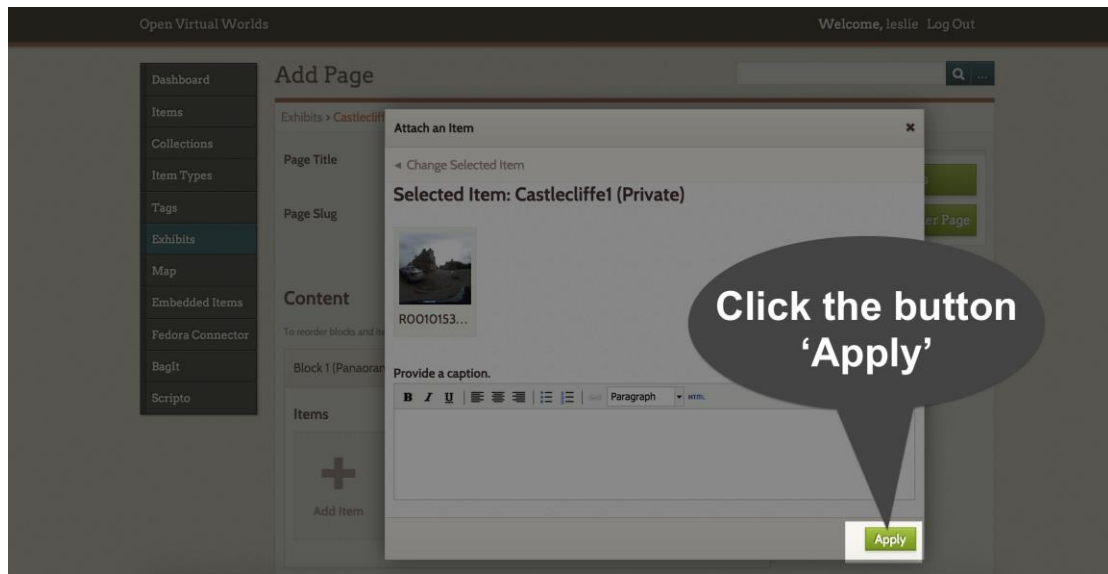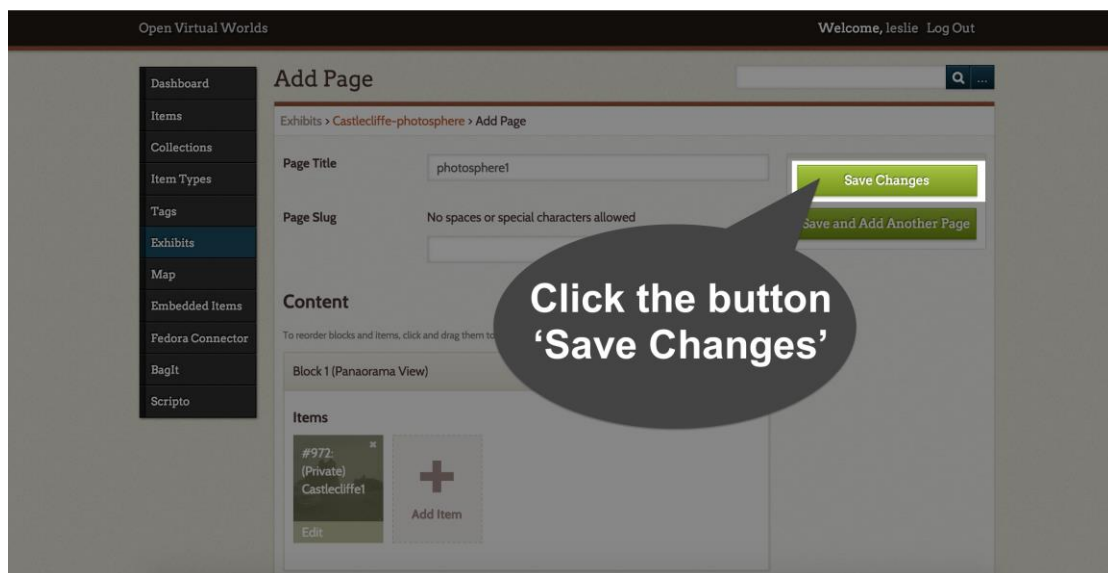

i) Click 'Add Item' in the added block

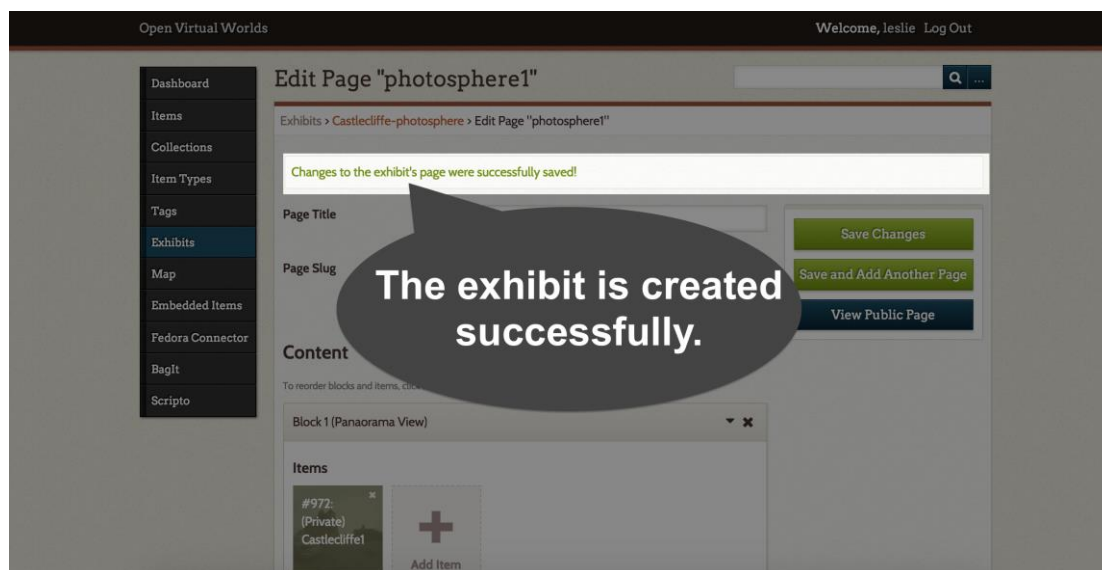j) Select an item in the pop up window, and click the button named 'Select Item'

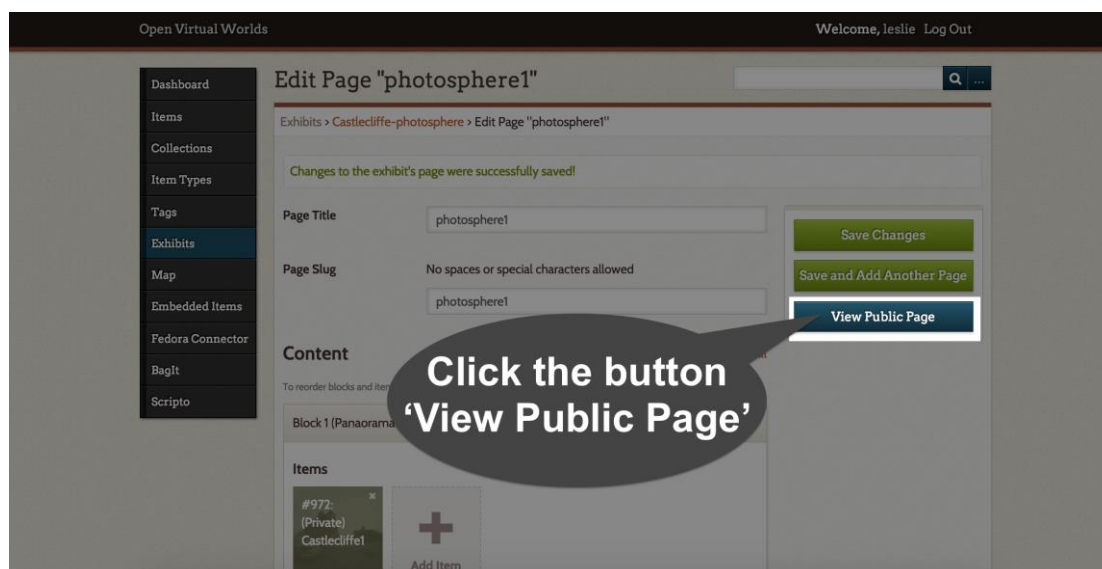k) Click the button 'Apply' in the bottom right corner of the pop up window
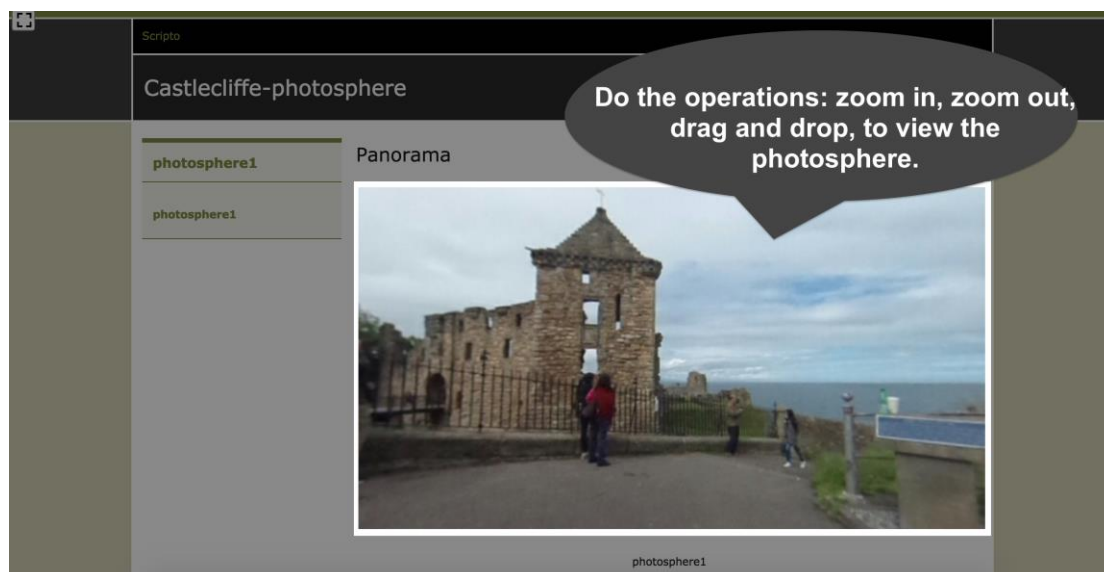
l) Click the button named 'Save Changes'

m) Click the button 'View Public Page' to view the exhibit

n) View the photosphere by zooming in / zooming out and drag/ drop on the webpage

10. Tips

a) Keep the mobile device in the same position, during rotating and changing angles

b) Try to capture images when there is no people or cars

c) Try not to capture images when there is moving objects, such as walking people and moving cars

d) Move the device slowly, when capturing

e) When the dot is in the circle, keep the device in the same position at lease 3 seconds

f) During the process of creating photosphere, if the captured photo is not satisfying, it can be canceled by tap the undo icon at the bottom left corner
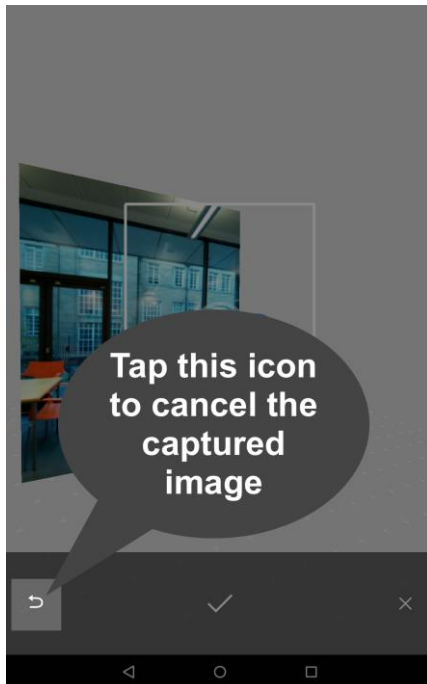
g) The delete icon 'X' in the bottom right corner allows users to remove the whole photos in this photosphere
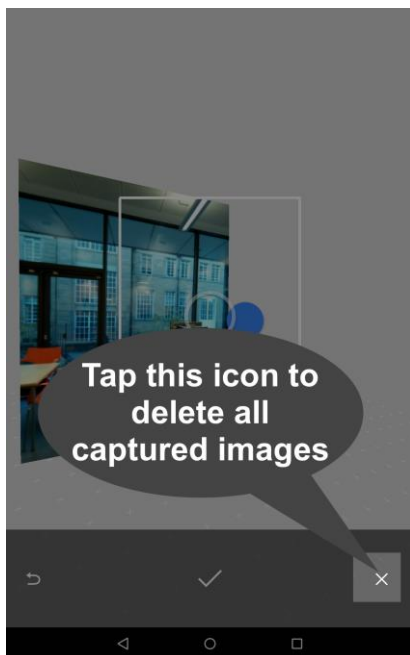
h) The tick icon in the bottom allows users to create the photosphere without finish moving all dots in the circle
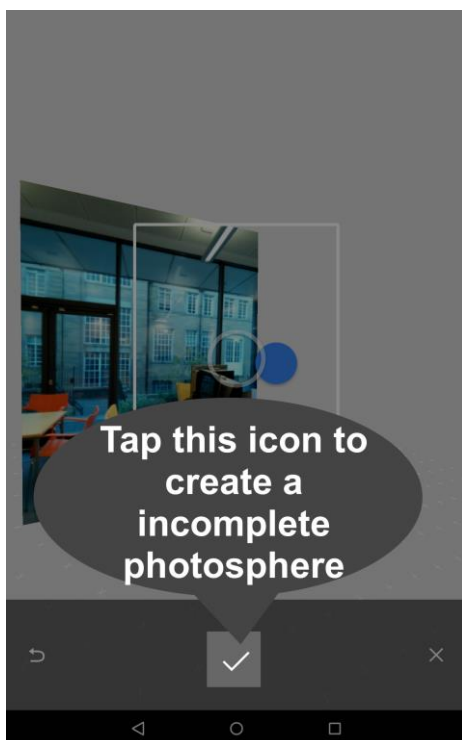
i) When uploading photospheres on Omeka, one item should only have one photosphere. In other words, you only allow uploading one photosphere for each item.

11. Reference

[1] Omeka. *Omeka: Serious Web Publishing.* [online] Access at: < http://omeka.org/about/ >