creams

USER MANUAL

Android Mobile Digitizer Application

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1.0 General Information

The digitizer app enables arts students to digitize a physical artwork through their smartphone and further upload it to CREAMS Web platform aiming to further process it and assign it to a virtual exhibition.

The digitization of artworks for conservation and analysis consists of a wide range of methods and techniques that offer additional information known as the metadata, collected or received by the user during the operation. The 2D or 3D recording of objects with the method of digitization offers the user the flexibility to preserve his creation as it is, but also to protect and store it over time.

1.1 Organization of the Manual

The user manual consists of the following four sections

1. General information
2. System Summary
3. How to download the application
4. Users – Privileges

General Information section explains in general terms the software/application overview and the sections of the user manual. This section provides a description of the purpose and scope of the User Manual and the problems that will be solved by interacting with this.

System Summary section explains about the hardware and software requirements for accessing the application/software and user access levels. This section provides an overview of the system's capabilities, functions, and operation, including the specific high-level functions performed by the system. Use graphics and tables, if appropriate.

How to download the application section explains the options available to download/access the application. Either is a software and you have to access the URL or is an application and you have to download it.

Using the Application section provides a detailed description of the functionalities of the application. This section describes each specific function of the system. In this section, describe any conventions that will be used in the relevant subsections. Each of the following subsections should be described in as much detail as required of each system function.

1.2 Application/Software Overview

During the implementation of the Digitizer application, after thorough research and analysis of various applications and technologies mentioned above in detail, it was initially decided that the application would be built in the Android Studio environment. Android Studio is an integrated programming environment for developing applications on the Android platform provided by Google.

2.0 System Summary

This section explains about the hardware and software requirements for accessing application/software and user access levels.

2.1 Hardware and Software Requirements

Requires a smart phone with Android operating system (OS)
Digitizer requires an application programming interface (API) level 26 and above. Considering the distribution of the current versions of the Android platform, the SDK version of CREAM's Digitizer Mobile application, Android 8.1 (version 27, also known as "Oreo"), was chosen.
To download and use the functionalities of the mobile app, you require an Internet connection on your mobile.

2.2 User Access Levels

Different types of roles are usually offered in an application.
Examples:

2.2.1 Guest User

This app can't be accessed without register the system

2.2.2 Registered User

This application gives the user only the opportunity to Log in. Although a hyperlink is provided   that redirects the user to the platform in order to be registered.

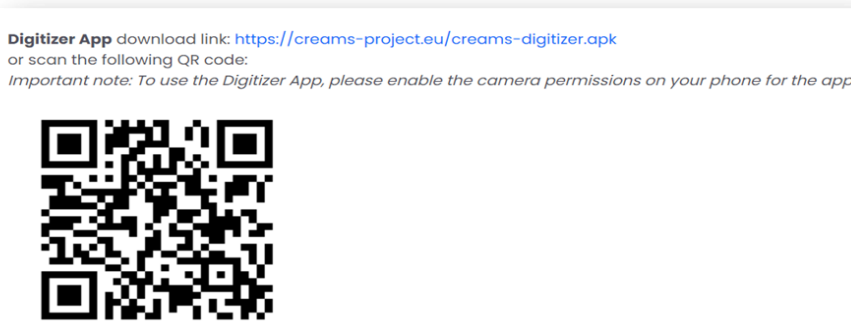## 3.0 How to download/access the application/software

This section will describe the steps the user must follow in order to access the software and how to install it on the device. In order to make it more user-friendly it is suggested to use screenshots or other media.

Digitizer application can be downloaded through the following ways:
- ❖ CREAMS Web Platform (https://xn--creamsapi-079d.cognitiveux.net/web_app/)

3.1 CREAMS Web Platform:

Following the upper link, the user will be directed to the CREAMS Web Platform in order to access the download software.

Digitizer App download link: https://creams-project.eu/creams-digitizer.apk
or scan the following QR code:
Important note: To use the Digitizer App, please enable the camera permissions on your phone for the app

After downloading the application, click on the "**CreamsDigitizer**" application icon from the mobile home screen/menu.
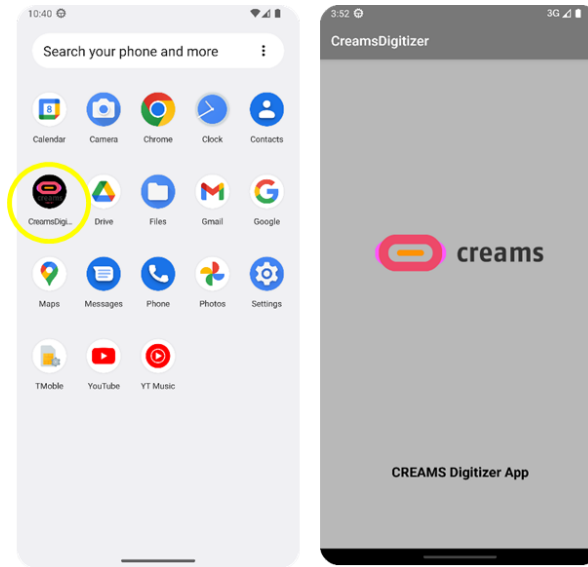
4.0 Users - Privileges
Following features can be availed by a registered user.
- ❖ Log in to the app.
- ❖ Unlimited tries until reaching the target scanning (2D/3D).
- ❖ Upload the scanned item to the Web App for the Virtual exhibition.

4.1 New User Registration
A Registered user can avail more benefits than a guest user. Hence it is recommended that users register themselves to access the additional services.

A user can register in the Web application using the "**Sign Up**" option available in-Home Page of the CREAMS platform.
If you are a new user, select "**Sign Up**" to register.
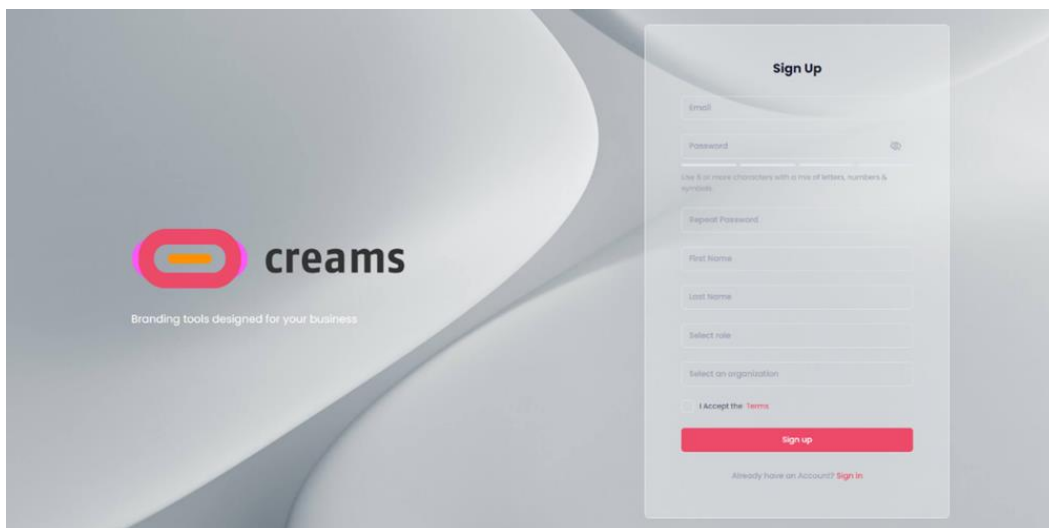
Fill all the required details and Submit.
On successful validation users will be registered and a message and notification will be sent to the registered email address.

4.2 Sign In

This section will describe the different scenarios/test-cases in order the user to log-in to the system
To **Sign In** in to the application click on the "**Sign In**" option from the Navigation Drawer in the Home page. Enter username and password to login. On successful login, the user is redirected to the home page screen.
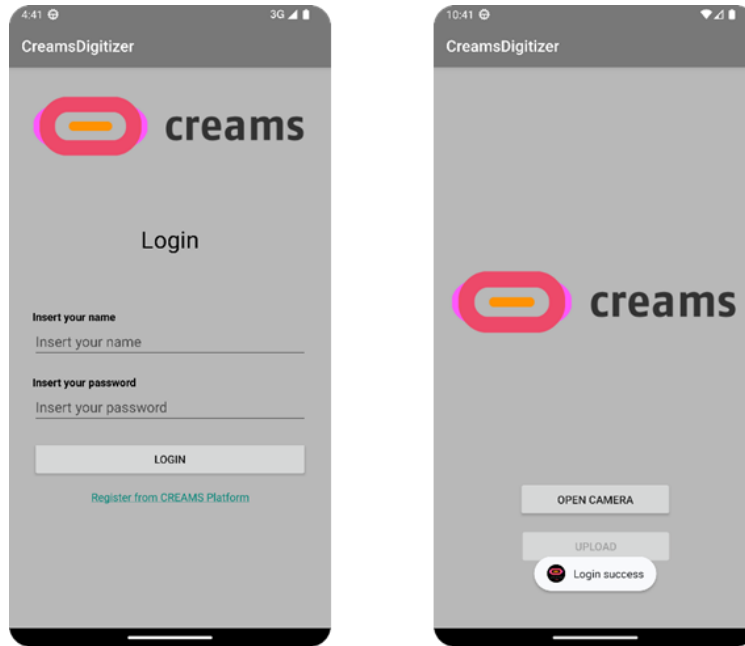
4.3 Error Messages

This section should address error messages and help facilities. Additional information and subsections may be added as necessary. Included in this section should be a list of all possible error messages, including the following:

•   Any numeric error codes associated with the error message
•   A description of the meaning of the error message
•   A discussion of how to resolve the error

In the Login screen, the error messages will be displayed only if the data that the user adds in the "Username" and "Password" fields do not coincide with those provided to the CREAMS platform.

In the last step of the application, when the object is forwarded from the application to the server, the Digitizer informs the user whether the loading was successful or not.
In case of failure the message "Upload Failed" is displayed, while in case of success the message "Upload Success" is shown.

4.4 Features/Functionalities (Low Fidelity Tool)

This section provides a description of each function. Include the following, as appropriate:

- Purpose and uses of the function
- Execution options associated with this function
- Description of function inputs
- Description of expected outputs and results
- Relationship to other functions
- Summary of function operation

### 4.4.1 Scan an artwork (Low Fidelity Tool – 2D)

"**Scan an artwork**" feature can be accessed in a single way, from the one available and activated button in the home page of the Digitizer App.
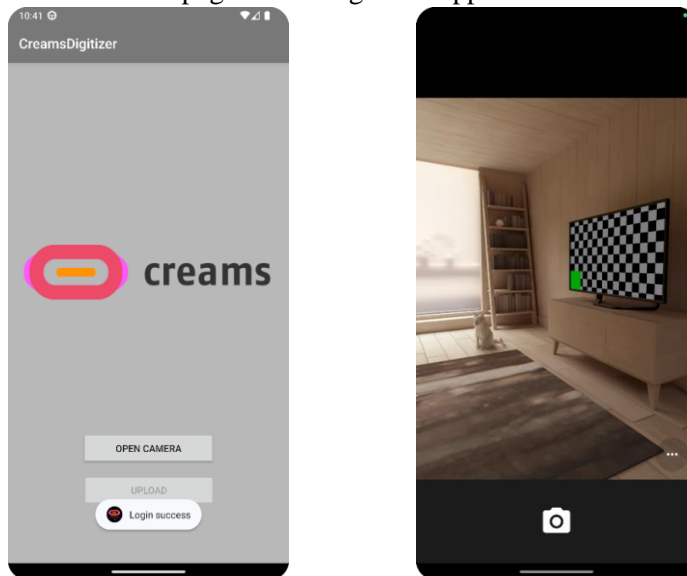
On click of the "**Open Camera**" option, the application will ask you for permission to access the device. The user needs to allow access in order to let the application continue.
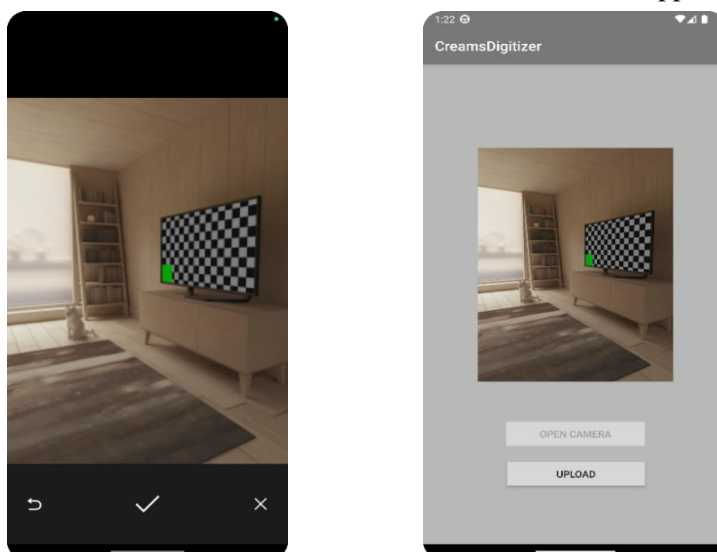
In some cases, it is possible that the permission is not automatically granted by the application so the user needs to gain access from the General Settings of the device.
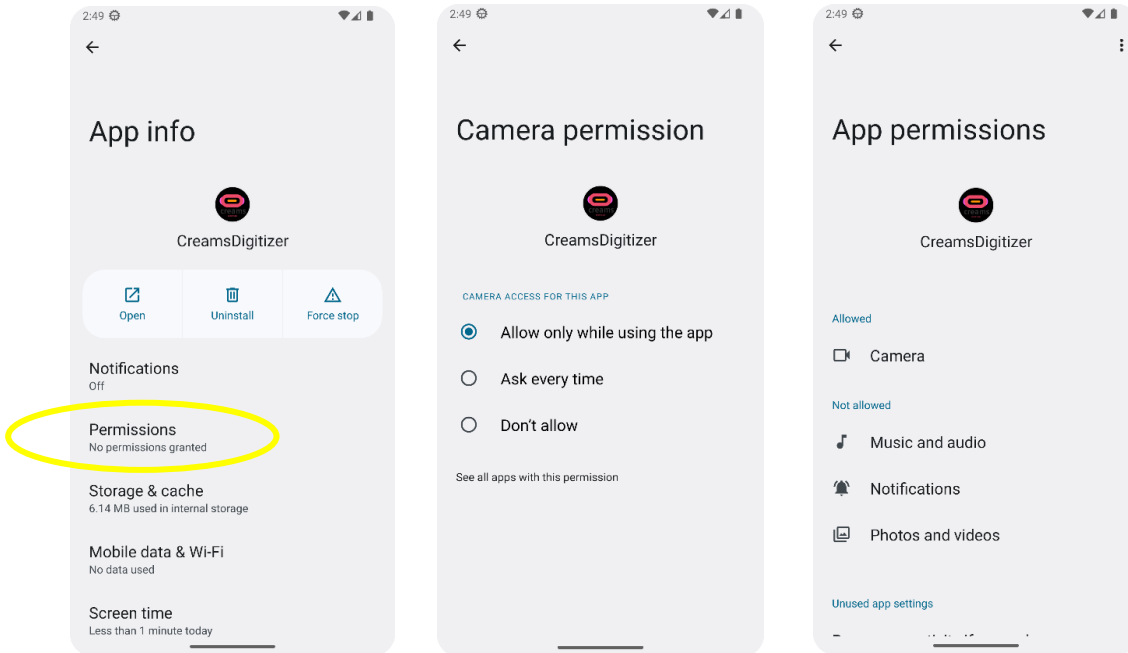
After the necessary actions have been taken to activate and use the camera in the Digitizer, the user can capture the 2D object he desires.

When the user decides which image they want to use, must select it and then send it to the Server via the "**Upload**" button.