## HOMEWORK 2 – BASIC STORAGE

For this application, two primary storage management approaches commonly used in iOS development were utilized: UserDefaults and FileManager. These approaches were used to store 3 different types of data:

1. Text input written by the user as shown in figure 1, object 1.
2. User preference to enable or disable the dark mode in the application. To do this a toggle was selected and is shown in figure 1, object 2.
3. An image that is downloaded from a URL and then locally stored. This task is shown in figure 1, object 3.
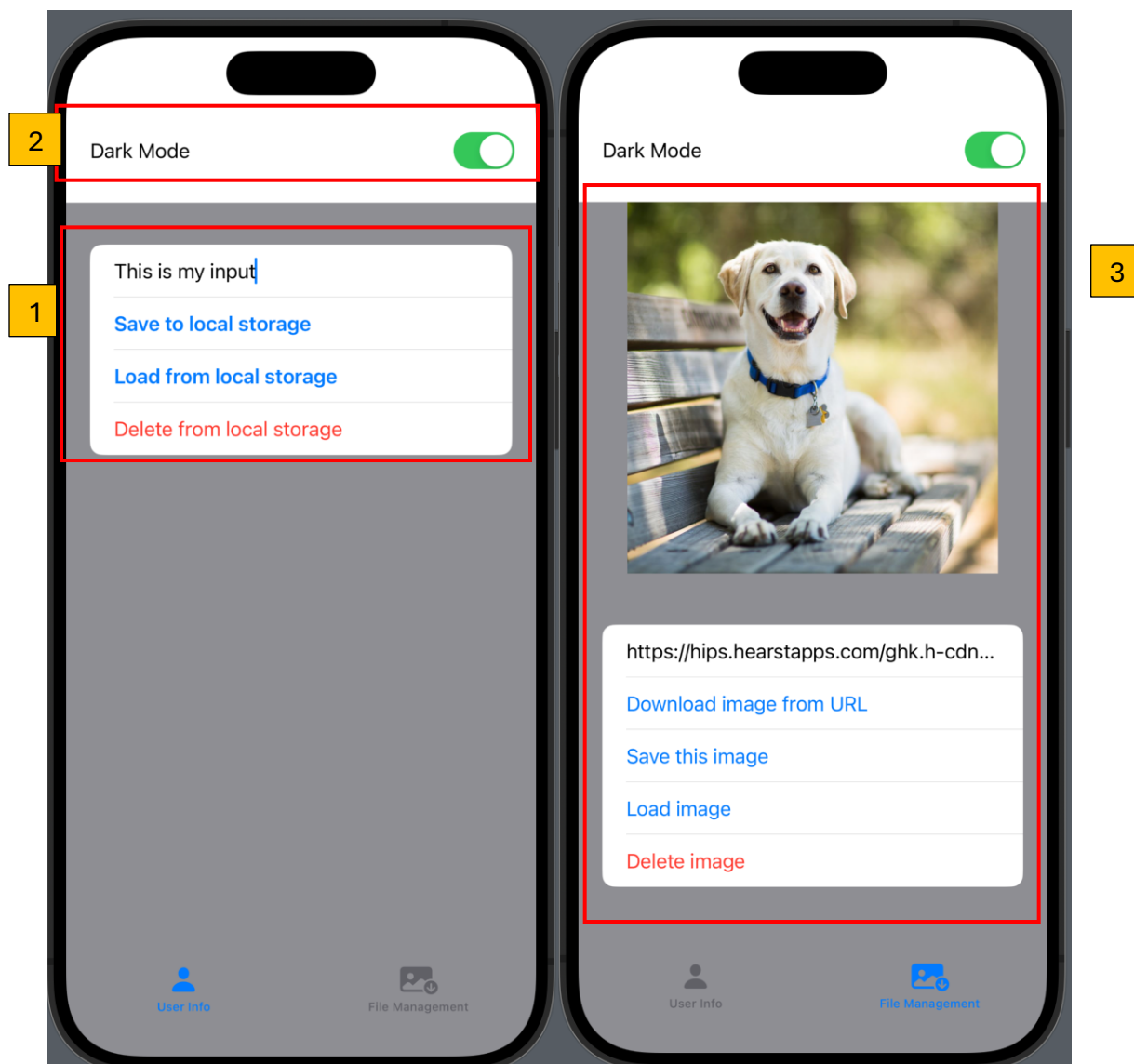
Figure 1. *Two views of the app to test basic storage.*

Pros and cons for UserDefaults:

This approach is a convenient way to store small amounts of data, such as user preferences. In this case, I opted for storing the text input and the dark mode preference using UserDefaults since it allows for the automatic loading of user preferences each time the app is launched. However, a disadvantage of this storage approach is that it's not appropriate for storing sensitive information such as passwords, nor is it suitable for storing large amount of data such as multiple images and videos.

Pros and cons for FileManager:

Compared to UserDefaults, FileManager offers greater flexibility and control over file management, allowing for the storage of media such as images, videos, and audio. For this app, FileManager was used to store and load an image that was previously downloaded from a URL, simulating the image retrieved by generative AI technology to create images. The advantage of this approach is that large amount of data can be organized into directories. However, a disadvantage is that it requires careful handling of file paths and error checking.