CLAIMS

What is claimed is:

1. A mobile device, comprising:

a processor; and

a memory storing instructions which when executed by the processor cause the processor to:

receive, by an application executing on the processor, authentication credentials for an account;

determine, by the application, a first contactless payment card associated with the account;

determine, by the application, a card manufacturer identifier (CMID) of the first contactless payment card;

receive, by the application from a digital asset management system based on the CMID, a plurality of images of the first payment card and a plurality of metadata attributes of the first contactless payment card;

determine, by the application based on the plurality of metadata attributes of the first contactless payment card and a plurality of attributes of the mobile device, a first orientation of the first contactless payment card to enable near-field communication (NFC) data transfer between the first contactless payment card and the mobile device;

select, by the application, a first image of the plurality of images depicting the first contactless payment card according to the first orientation;

generate, by the application, a graphical user interface (GUI) depicting the first image of the plurality of images of the first contactless payment card and an indication specifying to tap the first contactless payment card to the mobile device according to the first orientation; and

display, by the application, the GUI on a display.

2. The mobile device of claim 1, the memory storing instructions which when executed by the processor cause the processor to:

cause a camera of the mobile device to capture an image;

determine, by the application based on an analysis of the captured image, that the captured image depicts the first contactless payment card;

determine, by the application, that NFC data transfer has not been initiated between the mobile device and the first contactless payment card;

determine, by the application based on the plurality of metadata attributes of the first contactless payment card, a second orientation different than the first orientation; and update, by the application, the GUI to depict the first contactless payment card according to the second orientation and an

indication specifying to tap the first contactless payment card to the mobile device according to the second orientation.

3. The mobile device of claim 2, the memory storing instructions which when executed by the processor cause the processor to:

detect based on the analysis of the captured image, a graphical marker of the first contactless payment card; and

determine, by the application based on the graphical marker, at least one of the plurality of metadata attributes of the first contactless payment card.

4. The mobile device of claim 1, the memory storing instructions which when executed by the processor cause the processor to:

receive a plurality of attributes of the account, the plurality of attributes of the account comprising (i) a first name, (ii) a last name, (iii) an account number of the first contactless payment card, (iv) an expiration date of the first contactless payment card, and (vii) a card verification value (CV V) of the first contactless payment card;

overlay the plurality of attributes of the account on the first image; and

display the first image including the overlaid attributes of the account in the GUI.

5. The mobile device of claim 1, the plurality of metadata attributes of the first contactless payment card comprising: (i) a material used to manufacture the first contactless payment card, (ii) a location of an antenna of the first contactless payment card, (iii) a color of the first contactless payment card, and (iv) a first point on a surface of first contactless payment card.

6. The mobile device of claim 5, the memory storing instructions which when executed by the processor cause the processor to:

provide an indication of the first point on the surface of the first contactless payment card in the GUI, the first point one of a plurality of points on the surface of the first contactless payment card.

7. The mobile device of claim 6, the plurality of attributes of the mobile device comprising: (i) a location of an NFC antenna of the mobile device, and (ii) a location of the mobile device where the first contactless payment card is to be tapped to enable NFC data transfer.

8. A non-transitory computer-readable storage medium storing computer-readable program code executable by a processor to cause the processor to:

receive, by an application executing on the processor, authentication credentials for an account;

determine, by the application, a first contactless payment card associated with the account;

determine, by the application, a card manufacturer identifier (CMID) of the first contactless payment card;

receive, by the application from a digital asset management system based on the CMID, a plurality of images of the first payment card and a plurality of metadata attributes of the first contactless payment card;

determine, by the application based on the plurality of metadata attributes of the first contactless payment card and a plurality of attributes of the mobile device, a first orientation of the first contactless payment card to enable near-field communication (NFC) data transfer between the first contactless payment card and a mobile device comprising the processor;

select, by the application, a first image of the plurality of images depicting the first contactless payment card according to the first orientation;

generate, by the application, a graphical user interface (GUI) depicting the first image of the plurality of images of the first contactless payment card and an indication specifying to tap the first contactless payment card to the mobile device according to the first orientation; and

display, by the application, the GUI on a display.

9. The non-transitory computer-readable storage medium of claim 8, storing computer-readable program code executable by the processor to cause the processor to:

cause a camera of the mobile device to capture an image;

determine, by the application based on an analysis of the captured image, that the captured image depicts the first contactless payment card within a predefined distance of the camera;

determine, by the application, that NFC data transfer has not been initiated between the mobile device and the first contactless payment card;

determine, by the application based on the plurality of metadata attributes of the first contactless payment card, a second orientation different than the first orientation; and

update, by the application, the GUI to depict the first contactless payment card according to the second orientation and an indication specifying to tap the first contactless payment card to the mobile device according to the second orientation.

10. The non-transitory computer-readable storage medium of claim 8, storing computer-readable program code executable by the processor to cause the processor to:

receive, by the application prior to determining the first contactless payment card, a request specifying to perform an operation based on the first contactless payment card.

11. The non-transitory computer-readable storage medium of claim 10, storing computer-readable program code executable by the processor to cause the processor to:

receive a plurality of attributes of the account, the plurality of attributes of the account comprising (i) a first name, (ii) a last name, (iii) an account number of the first contactless payment card, (iv) an

expiration date of the first contactless payment card, and (vii) a card verification value (CVV) of the first contactless payment card;

overlay the plurality of attributes of the account on the first image; and display the first image including the overlaid attributes of the account in the GUI.

12. The non-transitory computer-readable storage medium of claim 8, the plurality of metadata attributes of the first contactless payment card comprising: (i) a material used to manufacture the first contactless payment card, (ii) a location of an antenna of the first contactless payment card, (iii) a color of the first contactless payment card, and (iv) a first point on a surface of first contactless payment card.

13. The non-transitory computer-readable storage medium of claim 12, storing computer-readable program code executable by the processor to cause the processor to:

provide an indication of the first point on the surface of the first contactless payment card in the GUI, the first point one of a plurality of points on the surface of the first contactless payment card.

14. The non-transitory computer-readable storage medium of claim 13, the plurality of attributes of the mobile device comprising: (i) a location of an NFC antenna of the mobile device, and (ii) a location of the mobile device where the first contactless payment card is to be tapped to enable NFC data transfer.

15. A method, comprising:

receiving, by an application executing on a processor of a mobile device, authentication credentials for an account;

determining, by the application, a first contactless payment card associated with the account;

determining, by the application, a card manufacturer identifier (CMID) of the first contactless payment card;

receiving, by the application from a digital asset management system based on the CMID, a plurality of images of the first payment card and a plurality of metadata attributes of the first contactless payment card;

determining, by the application based on the plurality of metadata attributes of the first contactless payment card and a plurality of attributes of the mobile device, a first orientation of the first contactless payment card to enable near-field communication (NFC) data transfer between the first contactless payment card and the mobile device;

selecting, by the application, a first image of the plurality of images depicting the first contactless payment card according to the first orientation;

generating, by the application, a graphical user interface (GUI) depicting the first image of the plurality of images of the first contactless payment card and an indication specifying to tap the first contactless payment card to the mobile device according to the first orientation; and

displaying, by the application, the GUI on a display.

16. The method of claim 15, further comprising:

causing a camera of the mobile device to capture an image;

determining, by the application based on an analysis of the captured image, that the captured image depicts the first contactless payment card;

determining, by the application, that NFC data transfer has not been initiated between the mobile device and the first contactless payment card;

determining, by the application based on the plurality of metadata attributes of the first contactless payment card, a second orientation different than the first orientation; and updating, by the application, the GUI to depict the first contactless payment card according to the second orientation and an indication specifying to tap the first contactless payment card to the mobile device according to the second orientation.

17. The method of claim 15, further comprising:

receiving a plurality of attributes of the account, the plurality of attributes of the account comprising (i) a first name, (ii) a last name, (iii) an account number of the first contactless payment card, (iv) an expiration date of the first contactless payment card, and (vii) a card

verification value (CVV) of the first contactless payment card; overlaying the plurality of attributes of the account on the first image; and displaying the first image including the overlaid attributes of the account in the GUI.

18. The method of claim 17, the plurality of metadata attributes of the first contactless payment card comprising: (i) a material used to manufacture the first contactless payment card, (ii) a location of an antenna of the first contactless payment card, (iii) a color of the first contactless payment card, and (iv) a first point on a surface of first contactless payment card.

19. The method of claim 18, further comprising:

providing an indication of the first point on the surface of the first contactless payment card in the GUI, the first point one of a plurality of points on the surface of the first contactless payment card.

20. The method of claim 19, the plurality of attributes of the mobile device comprising: (i) a location of an NFC antenna of the mobile device, and (ii) a location of the mobile device where the first contactless payment card is to be tapped to enable NFC data transfer.

1. A method, comprising:

displaying, by an application executing on a processor of a device, a first image of a plurality of images of a contactless card in a graphical

user interface (GUI), the first image depicting the contactless card according to a first orientation;

determining, by the application, that near-field communication (NFC) data transfer has not been initiated between the device and the contactless card within a threshold amount of time;

determining, by the application based on a plurality of metadata attributes of the contactless card and a plurality of attributes of the device, a second orientation different than the first orientation; and

updating, by the application, the GUI to display a second image of the plurality of images depicting the contactless card according to the second orientation and display an indication specifying to tap the contactless card to the device according to the second orientation.

2. The method of claim 1, further comprising:

selecting, by the application based on the second orientation, the second image of the plurality of images depicting the contactless card according to the second orientation.

3. The method of claim 1, further comprising:

receiving, by the application, a card manufacturer identifier (CMID) of the contactless card; and

receiving, by the application based on the CMID, the plurality of images of the contactless card and the plurality of metadata attributes of the contactless card.

4. The method of claim 1, further comprising:

capturing, by the application via a camera, an image; and

determining, by the application based on an analysis of the image, that the image depicts the contactless card.

5. The method of claim 4, further comprising:

detecting, by the application based on the image, a graphical marker on a surface of the contactless card; and

determine, by the application based on the graphical marker, at least one of the plurality of metadata attributes of the contactless card.

6. The method of claim 1, further comprising:

overlaying, by the application, the plurality of attributes of the contactless card on the second image; and

displaying, by the application, the second image including the overlaid attributes of the contactless card in the GUI.

7. The method of claim 1, wherein the first orientation aligns a communications interface of contactless card to a communications interface of the device, wherein the second orientation aligns the communications interface of contactless card to the communications interface of the device.

8. A computer-readable storage medium including instructions that when executed by a processor of a device, cause the processor to:

display a first image of a plurality of images of a contactless card in a graphical user interface (GUI), the first image depicting the contactless card according to a first orientation;

determine that near-field communication (NFC) data transfer has not been initiated between the device and the contactless card within a threshold amount of time;

determine, based on a plurality of metadata attributes of the contactless card and a plurality of attributes of the device, a second orientation different than the first orientation; and

update the GUI to display a second image of the plurality of images depicting the contactless card according to the second orientation and display an indication specifying to tap the contactless card to the device according to the second orientation.

9. The computer-readable storage medium of claim 8, wherein the instructions further cause the processor to:

select, based on the second orientation, the second image of the plurality of images depicting the contactless card according to the second orientation.

10. The computer-readable storage medium of claim 8, wherein the instructions further cause the processor to:

receive a card manufacturer identifier (CMID) of the contactless card; and

receive, based on the CMID, the plurality of images of the contactless card and the plurality of metadata attributes of the contactless card.

11. The computer-readable storage medium of claim 8, wherein the instructions further cause the processor to:

capture, via a camera, an image; and

determine, based on an analysis of the image, that the image depicts the contactless card.

12. The computer-readable storage medium of claim 11, wherein the instructions further cause the processor to:

detect, based on the image, a graphical marker on a surface of the contactless card; and

determine, based on the graphical marker, at least one of the plurality of metadata attributes of the contactless card.

13. The computer-readable storage medium of claim 8, wherein the instructions further cause the processor to:

overlay the plurality of attributes of the contactless card on the second image; and

display the second image including the overlaid attributes of the contactless card in the GUI.

14. The computer-readable storage medium of claim 8, wherein the first orientation aligns a communications interface of contactless card to a communications interface of the device, wherein the second orientation aligns the communications interface of contactless card to the communications interface of the device.

15. A computing apparatus comprising:

a processor; and

a memory storing instructions that, when executed by the processor, cause the processor to:

display a first image of a plurality of images of a contactless card in a graphical user interface (GUI), the first image depicting the contactless card according to a first orientation;

determine that near-field communication (NFC) data transfer has not been initiated between the apparatus and the contactless card within a threshold amount of time;

determine, based on a plurality of metadata attributes of the contactless card and a plurality of attributes of the apparatus, a second orientation different than the first orientation; and

update the GUI to display a second image of the plurality of images depicting the contactless card according to the second orientation and display an indication specifying to tap the contactless card to the apparatus according to the second orientation.

16. The computing apparatus of claim 15, wherein the instructions further cause the processor to:

select, based on the second orientation, the second image of the plurality of images depicting the contactless card according to the second orientation.

17. The computing apparatus of claim 15, wherein the instructions further cause the processor to:

receive a card manufacturer identifier (CMID) of the contactless card; and

receive, based on the CMID, the plurality of images of the contactless card and the plurality of metadata attributes of the contactless card.

18. The computing apparatus of claim 15, wherein the instructions further cause the processor to:

capture, via a camera, an image; and

determine, based on an analysis of the image, that the image depicts the contactless card.

19. The computing apparatus of claim 18, wherein the instructions further cause the processor to:

detect, based on the image, a graphical marker on a surface of the contactless card; and

determine, based on the graphical marker, at least one of the plurality of metadata attributes of the contactless card.

20. The computing apparatus of claim 15, wherein the instructions further cause the processor to:

overlay the plurality of attributes of the contactless card on the second image; and

display the second image including the overlaid attributes of the contactless card in the GUI.