

CLAIMS

1. An apparatus, comprising:
 - memory configured to store instructions;
 - one or more processors coupled with the memory, the one or more processors configured to process the instructions that, when executed by the one or more processors, causes the one or more processors to:
 - present, in a graphical user interface (GUI) of third-party application, an option to add or link account information associated with a contactless card with a third-party wallet;
 - detect, by the third-party application, a selection of the option to add or link the account information for the contactless card with a third-party wallet;
 - determine, by the third-party application, to perform an authentication operation with the contactless card to authenticate the contactless card;
 - cause, by the third-party application, a first-party application to perform the authentication operation, wherein the first-party application to perform a near-field communication (NFC) exchange with the contactless card;
 - receive, by the first-party application via an NFC interface, a cryptogram in the NFC exchange from the contactless card, the cryptogram comprising another cryptogram and one or more random numbers encrypted with a first session key, the another cryptogram comprising a unique identifier encrypted with a second session key;
 - authenticate, by the first-party application, the unique identifier;
 - in response to authenticating the unique identifier, link, by the third- party application, the account information for the contactless card with the third-party wallet.
2. The apparatus of claim 1, wherein the instructions are further configured to cause the one or more processors to receive, by the third-party application, user login information to log into an account associated with the third-party application.
3. The apparatus of claim 1, wherein the third-party application is a payment application and the first-party application is a banking application.
4. The apparatus of claim 1, wherein the instructions further cause the one or more processors to receive, by the first-party application, permission to share the account information with the third-party wallet.

5. The apparatus of claim 1, wherein the instructions are further configured to cause the one or more processors to send, by the first-party application, the cryptogram to a remote server to authenticate the cryptogram.
6. The apparatus of claim 5, wherein the instructions are further configured to cause the one or more processor to receive, by the first-party application, an indication that the unique identifier is successfully authenticated by the remote server.
7. The apparatus of claim 1, wherein the cryptogram is received as one or more NFC data exchange format (NDEF) messages from the contactless card.
8. An apparatus, comprising:
 - memory configured to store instructions;
 - one or more processors coupled with the memory, the one or more processors configured to process the instructions that, when executed by the one or more processors, causes the one or more processors to:
 - present, in a graphical user interface (GUI) of a first-pay application, an option to add or link account information associated with a contactless card with a third- party wallet for a third-party application;
 - detect, by the first-party application, a selection of the option to add or link the account information for the contactless card with a third-party wallet;
 - determine, by the first-party application, to perform an authentication operation with the contactless card to authenticate the contactless card;
 - perform, by the first-party application, a near-field communication (NFC) exchange with the contactless card;
 - receive, by the first-party application via an NFC interface, a cryptogram in the NFC exchange from the contactless card, the cryptogram comprising another cryptogram and one or more random numbers encrypted with a first session key, the another cryptogram comprising a unique identifier encrypted with a second session key;
 - authenticate, by the first-party application, the cryptogram;
 - in response to authenticating the cryptogram, cause the third- party application to add or link the account information for the contactless card with the third-party wallet.
9. The apparatus of claim 8, wherein the instructions are further configured to cause the one or more processors to receive, by the first-party application, user login information to log into an account associated with the first-party application.

10. The apparatus of claim 8, wherein the third-party wallet is associated with a payment application and the first-party application is a banking application.
11. The apparatus of claim 8, wherein the instructions further cause the one or more processors to receive, by the first-party application, permission to share the account information with the third-party wallet.
12. The apparatus of claim 8, wherein the instructions are further configured to cause the one or more processors to send, by the first-party application, the cryptogram to a remote server to authenticate.
13. The apparatus of claim 12, wherein the instructions are further configured to cause the one or more processor to receive, by the first-party application, an indication that the cryptogram is successfully authenticated by the remote server.
14. The apparatus of claim 8, wherein the cryptogram is received as one or more NFC data exchange format (NDEF) messages from the contactless card.
15. A computer-implemented method, comprising:
 - determining, by a third-party application, to add or link account information associated with a contactless card with a third-party wallet;
 - determining, by the third-party application, to perform an authentication operation with the contactless card to authenticate the contactless card with a first-party application;
 - initiating, by the third-party application, the first-party application to perform the authentication operation;
 - performing, by the first-party application, the authentication operation including performing a near-field communication (NFC) exchange with the contactless card;
 - receiving, by the first-party application via an NFC interface, a cryptogram in the NFC exchange from the contactless card, the cryptogram comprising another cryptogram and one or more random numbers encrypted with a first session key, the another cryptogram comprising a unique identifier encrypted with a second session key;
 - authenticating, by the first-party application, the cryptogram; and
 - in response to authenticating the cryptogram, enabling, by the first-party application, the third-party application to link or add the account information with the third-party wallet.

16. The computer-implemented method of claim 15, comprising receiving, by the third-party application, user login information to log into an account associated with the third-party application.
17. The computer-implemented method of claim 15, wherein the third-party application is a payment application and the first-party application is a banking application.
18. The computer-implemented method of claim 15, comprising receiving, by the first-party application, permission to share the account information with the third-party wallet.
19. The computer-implemented method of claim 15, comprising:
 - sending, by the first-party application, the cryptogram to a remote server to authenticate information comprised in the cryptogram; and
 - receiving, by the first-party application, an indication that the ~~authentication~~ information is successfully authenticated by the remote server.
20. The computer-implemented method of claim 15, wherein the cryptogram is received as one or more NFC data exchange format (NDEF) messages from the contactless card.