

CLAIMS

What is claimed is:

1. A system, comprising:
 - a processor; and
 - a memory storing instructions which when executed by the processor cause the processor to:
 - receive, by a payment application executing on the processor, an indication specifying to generate a payment account with the payment application using a contactless card;
 - output, by the payment application, an indication specifying to tap the contactless card to the system;
 - receive encrypted data from a communications interface of the contactless card, the encrypted data based on a customer identifier and a private key associated with the contactless card;
 - responsive to receiving the encrypted data, transmit the encrypted data to a server associated with the contactless card;
 - receive a push notification from the server;
 - open an account application associated with the contactless card responsive to receiving selection of the push notification;
 - receive, by the account application, confirmation input specifying to generate the payment account with the payment application using the contactless card;
 - transmit, by the account application, an indication of the confirmation input to the server;
 - open the payment application responsive to the payment application receiving a verification of the encrypted data from the server;
 - fill, by the payment application, a plurality of form fields of a form displayed in the payment application with account data received from the server, the account data of an account associated with the contactless card; and

generate, by the payment application, the payment account using the account data received from the server and filled into the plurality of form fields.

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

submit, by the payment application to a payment application account server, the form with the account data filled into the plurality of form fields; and

receive, by the payment application from the payment application account server, an indication specifying that a record for the payment account has been generated and stored in a payment application account database.

3. The system of claim 1, the received account data of the account to comprise: (i) a first name, (ii) a last name, (iii) an email address, (iv) an address, (v) an account number of the contactless card, (vi) an expiration date of the contactless card, and (vii) a card verification value (CVV) of the contactless card.

4. The system of claim 3, the memory storing instructions which when executed by the processor cause the processor to:

fill, by the payment application, the first name to a first name form field of the plurality of form fields;

fill, by the payment application, the last name to a last name form field of the plurality of form fields;

fill, by the payment application, the email address to an email address form field of the plurality of form fields;

fill, by the payment application, the address to an address form field of the plurality of form fields;

fill, by the payment application, the account number to an account number form field of the plurality of form fields;

fill, by the payment application, the expiration date to an expiration date form field of the plurality of form fields; and

fill, by the payment application, the CVV to a CVV form field of the plurality of form fields.

5. The system of claim 1, the received account data of the account to comprise a virtual account number generated for the account associated with the contactless card, an expiration date of the virtual account number, and a card verification value (CVV) of the virtual account number, the memory storing instructions which when executed by the processor cause the processor to:

fill, by the payment application, the virtual account number to an account number form field of the plurality of form fields;

fill, by the payment application, the expiration date to an expiration date form field of the plurality of form fields; and

fill, by the payment application, the CVV to a CVV form field of the plurality of form fields.

6. The system of claim 1, wherein the encrypted data is transmitted via a hypertext transfer protocol secure (HTTPS) application programming interface (API) call to an API of the server associated with the contactless card, the memory storing instructions which when executed by the processor cause the processor to:

receive, by the payment application, input specifying to submit the form to generate the payment account.

7. The system of claim 1, wherein the encrypted data is received from the contactless card based on the contactless card coming within communications range of a card reader of the system.

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

receive, by a payment application executing on the processor, an indication specifying to generate a payment account with the payment application using a contactless card;

output, by the payment application, an indication specifying to tap the contactless card to a device comprising the processor;

receive encrypted data from a communications interface of the contactless card, the encrypted data based on a customer identifier and a private key associated with the contactless card;

responsive to receiving the encrypted data, transmit the encrypted data to a server associated with the contactless card;

receive a push notification from the server;

open an account application associated with the contactless card responsive to receiving selection of the push notification;

receive, by the account application, confirmation input specifying to generate the payment account with the payment application using the contactless card;

transmit, by the account application, an indication of the confirmation input to the server;

open the payment application responsive to the payment application receiving a verification of the encrypted data from the server;

fill, by the payment application, a plurality of form fields of a form displayed in the payment application with account data received from the server, the account data of an account associated with the contactless card; and

generate, by the payment application, the payment account using the account data received from the server and filled into the plurality of form fields.

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:

submit, by the payment application to a payment application account server, the form with the account data filled into the plurality of form fields; and

receive, by the payment application from the payment application account server, an indication specifying that a record for the payment account has been generated and stored in a payment application account database.

10. The non-transitory computer-readable storage medium of claim 8, the received account data of the account to comprise: (i) a first name, (ii) a last name, (iii) an email address, (iv) an address, (v) an account number of the contactless card, (vi) an expiration date of the contactless card, and (vii) a card verification value (CVV) of the contactless 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:

fill, by the payment application, the first name to a first name form field of the plurality of form fields;

fill, by the payment application, the last name to a last name form field of the plurality of form fields;

fill, by the payment application, the email address to an email address form field of the plurality of form fields;

fill, by the payment application, the address to an address form field of the plurality of form fields;

fill, by the payment application, the account number to an account number form field of the plurality of form fields;

fill, by the payment application, the expiration date to an expiration date form field of the plurality of form fields; and

fill, by the payment application, the CVV to a CVV form field of the plurality of form fields.

12. The non-transitory computer-readable storage medium of claim 8, the received account data of the account to comprise a virtual account number generated for the account associated with the contactless card, an expiration date of the virtual account number, and a card verification value (CVV) of the virtual account number, the medium storing computer-readable program code executable by the processor to cause the processor to:

fill, by the payment application, the virtual account number to an account number form field of the plurality of form fields;

fill, by the payment application, the expiration date to an expiration date form field of the plurality of form fields; and

fill, by the payment application, the CVV to a CVV form field of the plurality of form fields.

13. The non-transitory computer-readable storage medium of claim 8, wherein the encrypted data is transmitted via a hypertext transfer protocol secure (HTTPS) application programming interface (API) call to an API of the server associated with the contactless card, the medium storing computer-readable program code executable by the processor to cause the processor to:

receive, by the payment application, input specifying to submit the form to generate the payment account.

14. The non-transitory computer-readable storage medium of claim 8, wherein the encrypted data is received from the contactless card based on the contactless card coming within communications range of a card reader of the device.

15. A method, comprising:

receiving, by a payment application executing on a processor of a device, an indication specifying to generate a payment account with the payment application using a contactless card;

outputting, by the payment application, an indication specifying to tap the contactless card to the device;

receiving encrypted data from a communications interface of the contactless card, the encrypted data based on a customer identifier and a private key associated with the contactless card;

responsive to receiving the encrypted data, transmitting the encrypted data to a server associated with the contactless card;

receiving a push notification from the server;

opening an account application associated with the contactless card responsive to receiving selection of the push notification;

receiving, by the account application, confirmation input specifying to generate the payment account with the payment application using the contactless card;

transmitting, by the account application, an indication of the confirmation input to the server;

opening the payment application responsive to the payment application receiving a verification of the encrypted data from the server;

filling, by the payment application, a plurality of form fields of a form displayed in the payment application with account data received from the server, the account data of an account associated with the contactless card; and

generating, by the payment application, the payment account using the account data received from the server and filled into the plurality of form fields.

16. The method of claim 15, further comprising:

submitting, by the payment application to a payment application account server, the form with the account data filled into the plurality of form fields; and

receiving, by the payment application from the payment application account server, an indication specifying that a record for the payment account has been generated and stored in a payment account database.

17. The method of claim 15, the received account data of the account to comprise: (i) a first name, (ii) a last name, (iii) an email address, (iv) an address, (v) an account number of the contactless card, (vi) an expiration date of the contactless card, and (vii) a card verification value (CVV) of the contactless card.

18. The method of claim 17, further comprising:

filling, by the payment application, the first name to a first name form field of the plurality of form fields;

filling, by the payment application, the last name to a last name form field of the plurality of form fields;

filling, by the payment application, the email address to an email address form field of the plurality of form fields;

filling, by the payment application, the address to an address form field of the plurality of form fields;

filling, by the payment application, the account number to an account number form field of the plurality of form fields;

filling, by the payment application, the expiration date to an expiration date form field of the plurality of form fields; and

filling, by the payment application, the CVV to a CVV form field of the plurality of form fields.

19. The method of claim 15, the received account data of the account to comprise a virtual account number generated for the account associated with the contactless card, an expiration date of the virtual account number, and a card verification value (CVV) of the virtual account number, the method further comprising:

filling, by the payment application, the virtual account number to an account number form field of the plurality of form fields;

filling, by the payment application, the expiration date to an expiration date form field of the plurality of form fields; and

filling, by the payment application, the CVV to a CVV form field of the plurality of form fields.

20. The method of claim 15, wherein the encrypted data is transmitted via a hypertext transfer protocol secure (HTTPS) application programming interface (API) call to an API of the server associated with the contactless card, wherein the encrypted data is received from the contactless card based on the contactless card coming within communications range of a card reader of the device, the method further comprising:

receiving, by the payment application, input specifying to submit the form to generate the payment account.