CLAIMS

1. A method, comprising:

determining, by an application executing on a device, that a payment field of a form has received focus;

receiving, by the application, encrypted data from a contactless card associated with an account;

determining, by the application based on a result received from a server, that the server verified the encrypted data based at least in part on decrypting the encrypted data;

receiving, by the application, an account number associated with the account;

providing, by the application, the account number to an autofill service; and

autofilling, by the autofill service, the account number to the payment field of the form.

2. The method of claim 1, further comprising:

transmitting, by the application, the encrypted data to the server prior to receiving the result.

3. The method of claim 1, wherein the account number is received from one of the contactless card or the server, the method further comprising:

determining, by the application, that the received account number is encrypted; and

decrypting, by the application, the encrypted account number prior to providing the account number to the autofill service.

4. The method of claim 1, wherein the application determines the payment field of the form has received focus based on a metadata attribute of the payment field, wherein the account number is autofilled to the payment field based on another metadata attribute of the payment field, the method further comprising:

determining, by the application, that the form includes the payment field, an expiration date field, a billing address field, and a card verification value (CVV) field.

5. The method of claim 4, further comprising:

receiving, by the application, an expiration date, a billing address, and a CVV associated with the account number;

providing, by the application, the expiration date, the billing address, and the CVV to the autofill service; and

autofilling, by the autofill service, the expiration date to the expiration date field of the form, the billing address to the billing address field of the form, and the CVV to the CVV field of the form.

6. The method of claim 1, further comprising:

modifying, by the application, the autofill service based on at least one of: (i) completion of a purchase, or (ii) expiration of a predetermined amount of time, wherein modifying the autofill service comprises one or more of: (i) removing the account number from the autofill service, or (ii) copying random data to the autofill service.

7. The method of claim 1, wherein the encrypted data is based on a cryptographic algorithm and a diversified key, wherein the diversified key is based on a master key and a counter value the method further comprising:

processing a transaction based on the account number autofilled into the payment field of the form.

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

determine that a payment field of a form has received focus;

receive encrypted data from a contactless card associated with an account;

determine, based on a result received from a server, that the server verified the encrypted data based at least in part on decrypting the encrypted data;

receive an account number associated with the account;

provide the account number to an autofill service; and

autofill, by the autofill service, the account number to the payment field of the form.

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

transmit the encrypted data to the server prior to receiving the result.

10. The computer-readable storage medium of claim 8, wherein the account number is received from one of the contactless card or the server, wherein the instructions further cause the processor to:

determine that the received account number is encrypted; and

decrypt the encrypted account number prior to providing the account number to the autofill service.

11. The computer-readable storage medium of claim 8, wherein the determination that the payment field of the form has received focus is based on a metadata attribute of the payment field, wherein the account number is autofilled to the payment field based on another metadata attribute of the payment field, wherein the instructions further cause the processor to:

determine that the form includes the payment field, an expiration date field, a billing address field, and a card verification value (CVV) field.

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

receive an expiration date, a billing address, and a CVV associated with the account number;

provide the expiration date, the billing address, and the CVV to the autofill service; and

autofill, by the autofill service, the expiration date to the expiration date field of the form, the billing address to the billing address field of the form, and the CVV to the CVV field of the form.

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

modify the autofill service based on at least one of: (i) completion of a purchase, or (ii) expiration of a predetermined amount of time, wherein modifying the autofill service comprises one or more of: (i) removing the account number from the autofill service, or (ii) copying random data to the autofill service.

14. The computer-readable storage medium of claim 8, wherein the encrypted data is based on a cryptographic algorithm and a diversified key, wherein the diversified key is based on a master key and a counter value.

15. A computing apparatus comprising:

a processor; and

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

determine that a payment field of a form has received focus;

receive encrypted data from a contactless card associated with an account;

determine, based on a result received from a server, that the server verified the encrypted data based at least in part on decrypting the encrypted data;

receive an account number associated with the account;

provide the account number to an autofill service; and

autofill, by the autofill service, the account number to the payment field of the form.

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

transmit the encrypted data to the server prior to receiving the result.

17. The computing apparatus of claim 15, wherein the account number is received from one of the contactless card or the server, wherein the instructions further cause the processor to:

determine that the received account number is encrypted; and

decrypt the encrypted account number prior to providing the account number to the autofill service.

18. The computing apparatus of claim 15, wherein the determination that the payment field of the form has received focus is based on a metadata attribute of the payment field, wherein the account number is autofilled to the payment field based on another metadata attribute of the payment field, wherein the instructions further cause the processor to:

determine that the form includes the payment field, an expiration date field, a billing address field, and a card verification value (CVV) field.

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

receive an expiration date, a billing address, and a CVV associated with the account number;

provide the expiration date, the billing address, and the CVV to the autofill service; and

autofill, by the autofill service, the expiration date to the expiration date field of the form, the billing address to the billing address field of the form, and the CVV to the CVV field of the form.

20. The computing apparatus of claim 15, wherein the encrypted data is based on a cryptographic algorithm and a diversified key, wherein the diversified key is based on a master key and a counter value, wherein the instructions further cause the processor to:

modify the autofill service based on at least one of: (i) completion of a purchase, or (ii) expiration of a predetermined amount of time, wherein modifying the autofill service comprises one or more of: (i) removing the account number from the autofill service, or (ii) copying random data to the autofill service.