CLAIMS

What is claimed is:

1. A payment method based on near field communication, comprising:

sending, by a mobile terminal with a near field communication function, an electromagnetic signal used to trigger an NFC tag;

obtaining tag information in the NFC tag in response to the electromagnetic signal;

starting a payment application in the mobile terminal based on the tag information, wherein the tag information comprises payment link information;

displaying, based on the payment link information by using the started payment application, a payment page comprising user information of a first transaction party, so that a second transaction party fills in amount information on the payment page;

obtaining payment information provided by the second transaction party based on the payment page, wherein the payment information comprises the amount information filled in by the second transaction party on the payment page; and

sending a payment processing request comprising the payment information to a server, wherein the server is configured to complete payment based on the payment processing request.

2. The method according to claim 1, wherein the tag information comprises instruction information used to start a payment application; and

the displaying, based on the payment link information, a payment page comprising user information of a first transaction party specifically comprises:

starting the payment application in the mobile terminal based on the instruction information; and

displaying the payment page based on the started payment application.

3. The method according to claim 2, wherein the tag information comprises request identification information used to request to obtain payment page information, and the displaying the payment page based on the started payment application specifically comprises:

generating, by the payment application in a started state, a payment page information obtaining request based on the request identification information;

sending the payment page obtaining request to the server;

obtaining payment page information that is generated by the server based on the payment page obtaining request and that comprises the user information of the first transaction party; and

displaying, based on the payment page information, the payment page comprising the user information of the first transaction party.

4. The method according to claim 1, wherein the tag information comprises user identification

information of the first transaction party, and the method further comprises:

determining, based on the user identification information, whether the first transaction party has transaction permission, to obtain a determining result; and

the displaying a payment page comprising user information of a first transaction party specifically comprises:

if the determining result indicates that the first transaction party has the transaction permission, displaying the payment page comprising the user information of the first transaction party.

5. The method according to claim 1, wherein the NFC tag is located in a carrier comprising a payment code of the first transaction party, or is located in a carrier that does not comprise a payment code of the first transaction party.

6. The method according to claim 1, wherein if the mobile terminal is displaying an application page of a second application when the tag information that is in the NFC tag and that comprises the payment link information is obtained, the displaying a payment page comprising user information of a first transaction party specifically comprises:

displaying the payment page at an upper layer of the application page of the second application through superimposition.

7. The method according to claim 6, wherein the method further comprises:

obtaining an exit operation performed by the second transaction party on the payment page; and

switching to the application page of the second application based on the exit operation for display.

8. The method according to claim 1, wherein the tag information comprises first triggering information, the first triggering information is used to trigger the mobile terminal to determine a terminal application with a payment function in the mobile terminal and generate an application selection page, and the method further comprises:

determining, in response to the first triggering information, the terminal application with the payment function in the mobile terminal;

generating the application selection page based on the terminal application with the payment function; and

displaying the application selection page.

9. The method according to claim 8, wherein after the displaying the application selection page, the method further comprises:

obtaining a target terminal application selected by the second transaction party from the application selection page; and

the displaying, based on the payment link information, a payment page comprising user information of a first transaction party specifically comprises:

accessing the payment link information by using the target terminal application; and

displaying, in the target terminal application, the payment page comprising the user information of the first transaction party.

10. The method according to claim 1, wherein before the obtaining tag information in the NFC tag in response to the electromagnetic signal, the method comprises:

determining whether the mobile terminal has started a code scanning application used to scan a payment code image; and

the obtaining tag information in the NFC tag in response to the electromagnetic signal specifically comprises:

obtaining the tag information in the NFC tag in response to the electromagnetic signal if the mobile terminal does not start the code scanning application used to scan the payment code image.

11. The method according to claim 1, wherein the payment page comprises at least one of a control used to confirm payment information, or an area used to fill in or select a payment manner.

12. The method according to claim 2, wherein the method further comprises:

determining whether the payment application exists in the mobile terminal; and

if the payment application does not exist in the mobile terminal generating prompt information indicating that payment cannot be performed.

13. The method according to claim 2, wherein the method further comprises:

determining whether the payment application exists in the mobile terminal; and

if the payment application does not exist in the mobile terminal, generating prompt information prompting a user to download and install the payment application.

14. The method according to claim 1, wherein the method further comprises:

displaying a payment password input page.

15. The method according to claim 1, wherein the method further comprises:

generating a page or prompt information indicating a transaction result.

16. A payment method based on near field communication, comprising:

sending, by a mobile terminal with a near field communication function, an electromagnetic signal used to trigger an NFC tag;

obtaining tag information in the NFC tag in response to the electromagnetic signal, wherein the tag information is used to trigger a payment procedure;

starting a payment application in the mobile terminal based on the tag information; and

sending transaction identification information used to indicate user payment account information in the mobile terminal to a payment device associated with the NFC tag, wherein the payment device executes the payment procedure based on the transaction identification information, and the payment

device is installed with a program or terminal application for executing the payment procedure.

17. The method according to claim 16, wherein before the sending transaction identification information used to indicate user payment account information in the mobile terminal to a payment device associated with the NFC tag, the method further comprises:

sending a payment information obtaining request comprising user identification information in the mobile terminal to a server; and

obtaining the transaction identification information generated by the server based on the user identification information.

18. The method according to claim 16, wherein the sending transaction identification information used to indicate user payment account information in the mobile terminal to a payment device associated with the NFC tag specifically comprises:

sending the transaction identification information to the payment device through near field communication.

19. The method according to claim 18, wherein the sending the transaction identification information to the payment device through near field communication specifically comprises:

writing the transaction identification information to the NFC tag; and

feeding back the transaction identification information to the payment device through near field communication based on the NFC tag.

20. The method according to claim 16, wherein the tag information comprises a device identifier of the payment device, and the sending transaction identification information used to indicate user payment account information in the mobile terminal to a payment device associated with the NFC tag specifically comprises:

sending a payment request comprising the device identifier to a server, wherein

the server is configured to: generate the transaction identification information, and send the transaction identification information to the payment device based on the device identifier.

21. The method according to claim 16, wherein the tag information comprises first link information used to start a payment application in the mobile terminal, and the method comprises:

starting the payment application based on the first link information; and

obtaining the transaction identification information based on the started payment application.

22. The method according to claim 21, wherein after the starting the payment application, the method further comprises:

displaying prompt information used to indicate that the payment application is started, wherein the prompt information specifically comprises prompt information in at least one form of vibration, a sound, a text, or an image.

23. The method according to claim 16, wherein the method further comprises:

obtaining transaction result information fed back by a server; and

displaying a transaction result page based on the transaction result information.

24. The method according to claim 23, wherein if the mobile terminal is displaying an application page of a second application when the tag information in the NFC tag is obtained, the displaying a transaction result page specifically comprises:

displaying the transaction result page at an upper layer of the application page of the second application through superimposition.

25. The method according to claim 24, wherein the method further comprises:

obtaining an exit operation performed on the transaction result page; and

switching to the application page of the second application based on the exit operation for display.

26. The method according to claim 21, wherein the tag information comprises an identifier of the payment application; and

the starting the payment application based on the first link information specifically comprises:

starting the payment application based on the identifier of the payment application.

27. The method according to claim 16, wherein the method further comprises:

generating a payment code image based on the transaction identification information; and

displaying the payment code image; and

the sending transaction identification information used to indicate user payment account information in the mobile terminal to a payment device associated with the NFC tag specifically comprises:

sending the transaction identification information to a payment device with a code scanning function by using the payment code image.

28. A payment method based on near field communication, comprising:

obtaining, by a mobile terminal with a near field communication function, tag information in an NFC tag associated with a payment device;

starting a payment application in the mobile terminal based on the tag information;

requesting, based on the started payment application, a server to send transaction identification information used to indicate user payment account information in the mobile terminal to the payment device, wherein the payment device sends a payment request to the server based on the transaction identification information, and the server processes a payment service based on the payment request, and feeds back payment result information; and

displaying a transaction result page based on the payment result information fed back by the server.

29. The method according to claim 28, wherein the method further comprises:

displaying a payment prompt page based on the tag information, wherein the payment prompt page comprises prompt information used to prompt to use the payment application to perform payment; and

obtaining a first preset operation performed by a user on the payment prompt page, and generating first confirmation information; and

the starting a payment application in the mobile terminal specifically comprises:

starting the payment application in the mobile terminal based on the first confirmation information.

30. The method according to claim 28, before the displaying a transaction result page, further comprising:

displaying a payment page comprising payment information; and

obtaining second confirmation information generated based on a second preset operation performed by a user on the payment page, wherein

the sending a payment processing request to a server specifically comprises:

sending the payment processing request to the server based on the second confirmation information.

31. The method according to claim 28, wherein the server is configured to: generate, based on the payment processing request, transaction identification information used to indicate user payment account information in the mobile terminal, and send the transaction identification information to the payment device, so that the payment device executes a payment procedure based on the transaction identification information.

32. The method according to claim 31, after the starting a payment application in the mobile terminal, further comprising:

displaying a payment page comprising payment information; and

obtaining second confirmation information generated based on a second preset operation performed by a user on the payment page, so that the server sends a payment procedure trigger instruction to the payment device after the second confirmation information is obtained, and the payment device is capable of executing the payment procedure based on the payment procedure trigger instruction and the obtained transaction identification information.

33. The method according to claim 30 or 32, before the displaying a payment page comprising payment information, further comprising:

determining, based on account information of the payment application in the mobile terminal, whether a user of the mobile terminal satisfies a preset payment condition, wherein the preset payment

condition represents a condition under which quick payment is capable of being performed, wherein

the displaying a payment page comprising payment information specifically comprises:

displaying the payment page comprising the payment information if the user does not satisfy the preset payment condition.

34. The method according to claim 33, wherein the displaying a transaction result page specifically comprises:

displaying the transaction result page if the user satisfies the preset payment condition.

35. The method according to claim 33, wherein the preset payment condition comprises at least one of the following: use of an instant payment function is authorized, the user is a highly active user who uses the payment application, and use of a password-free payment function is authorized.

36. The method according to claim 30 or 32, wherein the payment information comprises at least one of transaction amount information, transaction party information, or transaction manner information.

37. The method according to claim 28, wherein the method further comprises:

displaying prompt information used to prompt a user to set an instant payment function.

38. The method according to claim 37, wherein the method further comprises:

determining whether a quantity of times of displaying the prompt information used to prompt the user to set the instant payment function is less than or equal to a preset quantity of times in a preset time period; and

the displaying prompt information used to prompt a user to set an instant payment function specifically comprises:

if the quantity of times of displaying the prompt information is less than or equal to the preset quantity of times, displaying the prompt information used to prompt the user to set the instant payment function.

39. The method according to claim 37, wherein the method further comprises:

determining whether the instant payment function is enabled for a user account of the payment application in the mobile terminal; and

the displaying prompt information used to prompt a user to set an instant payment function specifically comprises:

if the instant payment function is not enabled for the user account, displaying first prompt information used to prompt the user to enable the instant payment function.

40. The method according to claim 39, before the displaying first prompt information used to prompt the user to enable the instant payment function, further comprising:

determining whether the user account is a highly active user account, wherein

the displaying first prompt information used to prompt the user to enable the instant payment function specifically comprises:

if the user account is a highly active user account, displaying the first prompt information used to prompt the user to enable the instant payment function.

41. The method according to claim 39, wherein the displaying prompt information used to prompt a user to set an instant payment function further specifically comprises:

if the instant payment function is started for the user account, displaying second prompt information used to prompt the user to disable the instant payment function.

42. The method according to claim 37, wherein the displaying prompt information used to prompt a user to set an instant payment function specifically comprises:

displaying, on the transaction result page or at an upper layer, the prompt information used to prompt the user to set the instant payment function.

43. The method according to claim 37, wherein a page on which the prompt information is located further comprises an operation control used to set the instant payment function.

44. The method according to claim 43, wherein the method further comprises:

displaying, based on an operation performed by the user on the operation control, a setting page used to set the instant payment function.

45. The method according to claim 28, before the displaying a transaction result page, further comprising:

displaying a payment response page, wherein the payment response page comprises prompt information indicating that payment is being performed.

46. The method according to claim 28, wherein the tag information comprises an application identifier of the payment application; and the starting a payment application in the mobile terminal based on the tag information specifically comprises:

starting the payment application in the mobile terminal based on the application identifier.

47. The method according to claim 29, wherein the tag information comprises link information, and the link information comprises information used to display the payment prompt page; and the displaying a payment prompt page based on the tag information specifically comprises:

displaying the payment prompt page based on the link information.

48. The method according to claim 47, wherein the link information further comprises an application identifier of the payment application.

49. A payment method based on near field communication, comprising:

obtaining, by a server, a payment processing request that comprises payment information and that is sent by a mobile terminal with a near field communication function, wherein the payment

information is provided by a second transaction party based on a displayed payment page comprising user information of a first transaction party, the payment page comprises an area used to fill in an amount by the second transaction party, the payment information comprises amount information filled in on the payment page by the second transaction party, and the payment page is displayed, based on payment link information comprised in obtained tag information in an NFC tag, by a started payment application that is started by the mobile terminal based on the tag information; and

completing a payment service for the first transaction party and the second transaction party based on the payment processing request.

50. A payment method based on near field communication, comprising:

obtaining, by a server, a payment information obtaining request sent by a mobile terminal with a near field communication function based on obtained tag information in an NFC tag, wherein the tag information is used to trigger a payment procedure;

generating, based on the payment information obtaining request, transaction identification information used to indicate user payment account information in the mobile terminal; and

sending the transaction identification information to a payment device associated with the NFC tag, wherein the payment device is configured to execute a payment procedure based on the transaction identification information, and the payment device is installed with a program or terminal application for executing the payment procedure.

51. A near field communication-based payment method, comprising:

obtaining, by a server, a payment processing request sent by a payment application started by a mobile terminal based on obtained tag information in an NFC tag;

generating, based on the payment processing request, transaction identification information used to indicate user payment account information in the mobile terminal;

sending the transaction identification information to a payment device, so that the payment device sends a payment request based on the transaction identification information;

processing a payment service based on the payment request to generate payment result information; and

feeding back the payment result information to the mobile terminal.

52. The method according to claim 51, wherein the method further comprises:

sending a payment procedure trigger instruction to the payment device, so that the payment device is capable of executing the payment procedure based on the payment procedure trigger instruction and the obtained transaction identification information.

53. A payment apparatus based on near field communication, applied to a mobile terminal, and comprising:

a triggering information sending module, configured to send an electromagnetic signal used to trigger an NFC tag;

a tag information obtaining module, configured to obtain tag information in the NFC tag in response to the electromagnetic signal, wherein the tag information comprises payment link information;

an application start module, configured to start a payment application in the mobile terminal based on the tag information, wherein the tag information comprises payment link information;

a page display module, configured to display, based on the payment link information by using the started payment application, a payment page comprising user information of a first transaction party, so that a second transaction party fills in amount information on the payment page;

a payment information obtaining module, configured to obtain payment information provided by the second transaction party based on the payment page, wherein the payment information comprises the amount information filled in by the second transaction party on the payment page; and

a request sending module, configured to send a payment processing request comprising the payment information to a server, wherein the server is configured to complete payment based on the payment processing request.

54. A payment apparatus based on near field communication, applied to a mobile terminal, and comprising:

a triggering information sending module, configured to send an electromagnetic signal used to trigger an NFC tag;

a tag information obtaining module, configured to obtain tag information in the NFC tag in response to the electromagnetic signal, wherein the tag information is used to trigger a payment procedure;

an application start module, configured to start a payment application in the mobile terminal based on the tag information; and

a transaction identifier sending module, configured to send transaction identification information used to indicate user payment account information in the mobile terminal to a payment device associated with the NFC tag, wherein the payment device executes a payment procedure based on the transaction identification information, and the payment device is installed with a program or terminal application for executing the payment procedure.

55. A near field communication-based payment apparatus, applied to a mobile terminal, and comprising:

a tag information obtaining module, configured to obtain tag information in an NFC tag associated with a payment device;

an application start module, configured to start a payment application in the mobile terminal based on the tag information;

a request sending module, configured to request, based on the started payment application, a server to send transaction identification information used to indicate user payment account information in the mobile terminal to the payment device, wherein the payment device sends a payment request to the server based on the transaction identification information, and the server processes a payment service based on the payment request, and feeds back payment result information; and

a page display module, configured to display a transaction result page based on the payment result information fed back by the server.

56. A payment apparatus based on near field communication, applied to a server, and comprising:

a request obtaining module, configured to obtain a payment processing request that comprises payment information and that is sent by a mobile terminal with a near field communication function, wherein the payment information is provided by a second transaction party based on a displayed payment page comprising user information of a first transaction party, the payment page comprises an area used to fill in an amount by the second transaction party, the payment information comprises amount information filled in on the payment page by the second transaction party, and the payment page is displayed, based on payment link information comprised in obtained tag information in an NFC tag, by a started payment application that is started by the mobile terminal based on the tag information; and

a request processing module, configured to complete a payment service for the first transaction party and the second transaction party based on the payment processing request.

57. A payment apparatus based on near field communication, applied to a server, and comprising:

a request obtaining module, configured to obtain a payment information obtaining request sent by a mobile terminal with a near field communication function based on obtained tag information in an NFC tag, wherein the tag information is used to trigger a payment procedure;

an information generation module, configured to generate, based on the payment information obtaining request, transaction identification information used to indicate user payment account information in the mobile terminal; and

a sending module, configured to send the transaction identification information to a payment device associated with the NFC tag, wherein the payment device is configured to execute a payment procedure based on the transaction identification information.

58. A payment apparatus based on near field communication, applied to a server, and comprising:

a request obtaining module, configured to obtain a payment processing request sent by a payment

application started by a mobile terminal based on obtained tag information in an NFC tag;

an information generation module, configured to generate, based on the payment processing request, transaction identification information used to indicate user payment account information in the mobile terminal;

a sending module, configured to send the transaction identification information to a payment device, so that the payment device sends a payment request based on the transaction identification information;

a payment processing module, configured to process a payment service based on the payment request to generate payment result information; and

a result sending module, configured to feed back the payment result information to the mobile terminal.

59. A payment device based on near field communication, comprising:

at least one processor; and

a storage communicatively connected to the at least one processor, wherein

the storage stores instructions capable of being executed by the at least one processor, and the instructions are executed by the at least one processor, so that the at least one processor is capable of performing the near field communication-based payment method according to any one of claims 1 to 15, any one of claims 16 to 27, any one of claims 28 to 48, claim 49, claim 50, or either claim 51 or 52.

60. A computer-readable medium, wherein the computer-readable medium stores computer-readable instructions, and the computer-readable instructions are capable of being executed by a processor to implement the near field communication-based payment method according to any one of claims 1 to 15, any one of claims 16 to 27, any one of claims 28 to 48, claim 49, claim 50, or either claim 51 or 52.