CLAIMS

What is claimed is:

1. An acquiring apparatus, comprising a controller, a first NFC module, and a second NFC module, wherein the first NFC module and the second NFC module work under control of the controller;

the first NFC module is configured to work in a card reader mode, and is configured to transmit a first radio frequency signal, detect first response information, and obtain customer payment information based on the first response information; and

the second NFC module is configured to work in a card emulation mode, and is configured to send second response information comprising merchant acquiring information in response to sensing a second radio frequency signal.

2. The acquiring apparatus according to claim 1, wherein the first NFC module and the second NFC module are entity modules independent of each other;

the first NFC module is disposed at a position corresponding to a first sensing area of the acquiring apparatus, and comprises a first NFC chip and a first NFC antenna; and

the second NFC module is disposed at a position corresponding to a second sensing area of the acquiring apparatus, and comprises a second NFC chip and a second NFC antenna.

3. The acquiring apparatus according to claim 2, wherein the controller is configured to enable, in response to receiving an acquiring instruction, the first NFC module and the second NFC module to work simultaneously.

4. The acquiring apparatus according to claim 1, wherein the first NFC module and the second NFC module are formed by a same NFC module, and the same NFC module works as the first NFC module or the second NFC module based on a control signal of the controller.

5. The acquiring apparatus according to claim 4, wherein the controller is configured to:

send a first control signal to the same NFC module in response to receiving a first setting instruction; and

send a second control signal to the same NFC module in response to receiving a second setting instruction; and

the same NFC module is configured to:

work as the first NFC module in response to receiving the first control signal; and

work as the second NFC module in response to receiving the second control signal.

6. The acquiring apparatus according to claim 4, wherein the same NFC module is configured to:

work as the first NFC module in a default state, and switch to work as the second NFC module

in response to a switching signal of the controller; or

work as the second NFC module in a default state, and switch to work as the first NFC module in response to a switching signal of the controller.

7. The acquiring apparatus according to claim 4, wherein the same NFC module is configured to:

work as the first NFC module, and send, by using the first radio frequency signal, a first request used to request to work as the second NFC module to complete payment; and

in response to receiving a confirmation response for the first request, switch to work as the second NFC module, and send the second response information.

8. The acquiring apparatus according to claim 4, wherein the same NFC module is configured to:

work as the first NFC module, and send, by using the first radio frequency signal, a second request used to request to work as the first NFC module to complete payment; and

in response to receiving a confirmation response for the second request, obtain the customer payment information based on the confirmation response.

9. The acquiring apparatus according to claim 8, wherein the same NFC module is further configured to:

if the confirmation response is not received, send, by using the first radio frequency signal, a first request used to request to work as the second NFC module to complete payment.

10. The acquiring apparatus according to claim 4, wherein the same NFC module is configured to:

work as the first NFC module, and send, by using the first radio frequency signal, a second request used to request to work as the first NFC module to complete payment;

in response to determining, based on a confirmation response for the second request, that an interaction object is a specific digital wallet, send, by using the first radio frequency signal, a first request used to request to work as the second NFC module to complete payment; and

in response to receiving a confirmation response for the first request, switch to work as the second NFC module, and send the second response information.

11. The acquiring apparatus according to claim 4, wherein the acquiring apparatus further comprises a magnetic field sensor;

the controller is configured to:

send a first control signal to the same NFC module in response to that a change amplitude of magnetic field strength determined based on magnetic field data detected by the magnetic field sensor is less than a first threshold; and

send a second control signal to the same NFC module in response to that an amplitude of a

magnetic field strength change is greater than a second threshold; and

the same NFC module is configured to:

work as the first NFC module in response to receiving the first control signal; and

work as the second NFC module in response to receiving the second control signal.

12. The acquiring apparatus according to claim 4, wherein the same NFC module is configured to:

work as the first NFC module during a first time period of a first cycle; and

work as the second NFC module during a second time period of the first cycle that is different from the first time period.

13. A control method for an acquiring apparatus, wherein the acquiring apparatus comprises a first NFC module and a second NFC module, and the control method comprises:

enabling, in a first condition, the first NFC module to work in a card reader mode, to transmit a first radio frequency signal, detect first response information, and obtain customer payment information based on the first response information; and

enabling, in a second condition, the second NFC module to work in a card emulation mode, to send second response information comprising merchant acquiring information in response to sensing a second radio frequency signal.

14. The method according to claim 13, wherein the first NFC module and the second NFC module are modules independent of each other, and both the first condition and the second condition are that an acquiring instruction is received.

15. The method according to claim 13, wherein the first NFC module and the second NFC module are formed by a same NFC module, and either the first condition or the second condition is met; and

when the first condition is met, the same NFC module is enabled to work as the first NFC module; and when the second condition is met, the same NFC module is enabled to work as the second NFC module.

16. The method according to claim 15, wherein

the first condition is that a first setting instruction is received, and the second condition is that a second setting instruction is received; and

the first setting instruction and/or the second setting instruction are/is provided to the acquiring apparatus in response to a merchant or a customer setting a working mode of the acquiring apparatus.

17. The method according to claim 15, wherein

the enabling, in a first condition, the first NFC module to work in a card reader mode comprises:

in a default state, enabling the same NFC module to work as the first NFC module, and send, by using the first radio frequency signal, a first request used to request to work as the second NFC module to complete payment; and

if a confirmation response for the first request is not received, enabling the same NFC module to work as the first NFC module, and send, by using the first radio frequency signal, a second request used to request to work as the first NFC module to complete payment; and

the enabling, in a second condition, the second NFC module to work in a card emulation mode comprises:

in response to receiving the confirmation response, enabling the same NFC module to switch to work as the second NFC module, and send the second response information.

18. The method according to claim 15, wherein

the enabling, in a first condition, the first NFC module to work in a card reader mode comprises:

in a default state, enabling the same NFC module to work as the first NFC module, and send, by using the first radio frequency signal, a second request used to request to work as the first NFC module to complete payment;

in response to receiving a confirmation response for the second request, enabling the same NFC module to work as the first NFC module, and obtain the customer payment information based on the confirmation response; and

if the confirmation response is not received, enabling the same NFC module to work as the first NFC module, and send, by using the first radio frequency signal, a first request used to request to work as the second NFC module to complete payment; and

the enabling, in a second condition, the second NFC module to work in a card emulation mode comprises:

in response to receiving a confirmation response for the first request, enabling the same NFC module to switch to work as the second NFC module, and send the second response information.

19. The method according to claim 15, wherein

the enabling, in a first condition, the first NFC module to work in a card reader mode comprises:

in a default state, enabling the same NFC module to work as the first NFC module, and send, by using the first radio frequency signal, a second request used to request to work as the first NFC module to complete payment; and

in response to determining, based on a confirmation response for the second request, that an interaction object is a specific digital wallet, enabling the same NFC module to work as the first NFC module, and send, by using the first radio frequency signal, a first request used to request to

work as the second NFC module to complete payment; and

the enabling, in a second condition, the second NFC module to work in a card emulation mode comprises:

in response to receiving a confirmation response for the first request, enabling the same NFC module to switch to work as the second NFC module, and send the second response information.

20. A computer program product, comprising a computer program/instructions, wherein the computer program/instructions are executed by a processor to implement the steps of the method according to any one of claims 13 to 19.