CLAIMS

What is claimed is:

1. A method for connecting to a Wireless Fidelity Wi-Fi hotspot device, comprising:

generating, by a Wi-Fi hotspot device, a two-dimensional barcode according to Wi-Fi authentication information, wherein the two-dimensional barcode comprises the Wi-Fi authentication information, and the Wi-Fi authentication information is used for authentication prior to connection to the Wi-Fi hotspot device; and

presenting, by the Wi-Fi hotspot device, the two-dimensional barcode to user equipment UE by using a display screen of the Wi-Fi hotspot device.

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

dynamically updating, by the Wi-Fi hotspot device, the Wi-Fi authentication information; and

the generating, by a Wi-Fi hotspot device, a two-dimensional barcode according to Wi-Fi authentication information comprises:

dynamically generating, by the Wi-Fi hotspot device, a two-dimensional barcode according to dynamically updated Wi-Fi authentication information.

3. The method according to claim 1 or 2, wherein the Wi-Fi authentication information comprises at least one of the following items: a service set identifier SSID, an authentication mode, and an authentication password.

4. A method for connecting to a Wireless Fidelity Wi-Fi hotspot device, comprising:

generating, by a Wi-Fi hotspot device, a two-dimensional barcode according to Wi-Fi authentication information, wherein the two-dimensional barcode comprises the Wi-Fi authentication information, and the Wi-Fi authentication information is used for authentication prior to connection to the Wi-Fi hotspot device; and

setting, by the Wi-Fi hotspot device, the two-dimensional barcode in a management application program that corresponds to the Wi-Fi hotspot device, wherein the management application program is used to provide the two-dimensional barcode for a first user equipment UE, and the first UE is used to present, by using a display screen of the first UE, the two-dimensional barcode to a second UE that needs to connect to the Wi-Fi hotspot device.

5. The method according to claim 4, wherein the management application program runs in the first UE.

6. The method according to claim 4 or 5, wherein the method further comprises:

dynamically updating, by the Wi-Fi hotspot device, the Wi-Fi authentication information; and

the generating, by a Wi-Fi hotspot device, a two-dimensional barcode according to Wi-Fi

authentication information comprises:

dynamically generating, by the Wi-Fi hotspot device, a two-dimensional barcode according to dynamically updated Wi-Fi authentication information.

7. The method according to any one of claims 4 to 6, wherein the Wi-Fi authentication information comprises at least one of the following items: a service set identifier SSID, an authentication mode, and an authentication password.

8. A method for connecting to a Wireless Fidelity Wi-Fi hotspot device, comprising:

extracting, by a first user equipment UE, Wi-Fi authentication information comprised in a two-dimensional barcode; and

completing, by the first UE, authentication with a Wi-Fi hotspot device according to the Wi-Fi authentication information, and connecting to the Wi-Fi hotspot device.

9. The method according to claim 8, wherein the two-dimensional barcode is generated by the Wi-Fi hotspot device.

10. The method according to claim 8, wherein the two-dimensional barcode is generated by a management device that corresponds to the Wi-Fi hotspot device.

11. The method according to any one of claims 8 to 10, wherein the extracting, by the first UE, Wi-Fi authentication information comprised in a two-dimensional barcode comprises:

scanning, by the first UE, a two-dimensional barcode that is presented on a display screen of the Wi-Fi hotspot device, and extracting Wi-Fi authentication information comprised in the two-dimensional barcode.

12. The method according to any one of claims 8 to 10, wherein the extracting, by the first UE, Wi-Fi authentication information comprised in a two-dimensional barcode comprises:

scanning, by the first UE, a two-dimensional barcode that is presented on a display screen of a second UE, and extracting Wi-Fi authentication information comprised in the two-dimensional barcode, wherein the two-dimensional barcode is acquired by the second UE from a management application program that corresponds to the Wi-Fi hotspot device.

13. The method according to claim 12, wherein the management application program runs in thesecond UE.

14. The method according to any one of claims 8 to 13, before the connecting to the Wi-Fi hotspot device, further comprising:

checking, by the first UE, whether a Wi-Fi function of the first UE is enabled; and

if the Wi-Fi function is not enabled, automatically enabling, by the first UE, the Wi-Fi function before connecting to the Wi-Fi hotspot device.

15. The method according to any one of claims 8 to 14, wherein the Wi-Fi authentication

information comprises at least one of the following items: a service set identifier SSID, an authentication mode, and an authentication password.

16. A Wireless Fidelity Wi-Fi hotspot device, comprising:

a generating unit, configured to generate a two-dimensional barcode according to Wi-Fi authentication information, wherein the two-dimensional barcode comprises the Wi-Fi authentication information, and the Wi-Fi authentication information is used for authentication prior to connection to the Wi-Fi hotspot device; and

a presenting unit, configured to present the two-dimensional barcode to user equipment UE by using a display screen of the Wi-Fi hotspot device.

17. The Wi-Fi hotspot device according to claim 16, further comprising an updating unit, wherein:

the updating unit is configured to dynamically update the Wi-Fi authentication information; and

the generating unit is specifically configured to dynamically generate a two-dimensional barcode according to dynamically updated Wi-Fi authentication information.

18. The Wi-Fi hotspot device according to claim 16 or 17, wherein the Wi-Fi authentication information comprises at least one of the following items: a service set identifier SSID, an authentication mode, and an authentication password.

19. A Wireless Fidelity Wi-Fi hotspot device, comprising:

a generating unit, configured to generate a two-dimensional barcode according to Wi-Fi authentication information, wherein the two-dimensional barcode comprises the Wi-Fi authentication information, and the Wi-Fi authentication information is used for authentication prior to connection to the Wi-Fi hotspot device; and

a setting unit, configured to set the two-dimensional barcode in a management application program that corresponds to the Wi-Fi hotspot device, wherein the management application program is used to provide the two-dimensional barcode for a first user equipment UE, and the first UE is used to present, by using a display screen of the first UE, the two-dimensional barcode to a second UE that needs to connect to the Wi-Fi hotspot device.

20. The Wi-Fi hotspot device according to claim 19, wherein the management application program runs in the first UE.

21. The Wi-Fi hotspot device according to claim 19 or 20, further comprising an updating unit, wherein:

the updating unit is configured to dynamically update the Wi-Fi authentication information; and

the generating unit is specifically configured to dynamically generate a two-dimensional barcode according to dynamically updated Wi-Fi authentication information.

22. The Wi-Fi hotspot device according to any one of claims 19 to 21, wherein the Wi-Fi authentication information comprises at least one of the following items: a service set identifier SSID, an authentication mode, and an authentication password.

23. User equipment, comprising:

an extracting unit, configured to extract Wi-Fi authentication information comprised in a two-dimensional barcode; and

a connecting unit, configured to complete authentication with a Wi-Fi hotspot device according to the Wi-Fi authentication information, and connect to the Wi-Fi hotspot device.

24. The user equipment according to claim 23, wherein the two-dimensional barcode is generated by the Wi-Fi hotspot device, or the two-dimensional barcode is generated by a management device that corresponds to the Wi-Fi hotspot device.

25. The user equipment according to claim 23 or 24, wherein the extracting unit is specifically configured to scan a two-dimensional barcode that is presented on a display screen of the Wi-Fi hotspot device, and extract Wi-Fi authentication information comprised in the two-dimensional barcode.

26. The user equipment according to claim 23 or 24, wherein the extracting unit is specifically configured to scan a two-dimensional barcode that is presented on a display screen of another user equipment UE, and extract Wi-Fi authentication information comprised in the two-dimensional barcode, wherein the two-dimensional barcode is acquired by the another UE from a management application program that corresponds to the Wi-Fi hotspot device.

27. The user equipment according to claim 26, wherein the management application program runs in the another UE.

28. The user equipment according to any one of claims 23 to 27, wherein the connecting unit is further configured to: before connecting to the Wi-Fi hotspot device, check whether a Wi-Fi function of the user equipment is enabled; and if the Wi-Fi function is not enabled, automatically enable the Wi-Fi function before connecting to the Wi-Fi hotspot device.

29. A Wireless Fidelity Wi-Fi hotspot device, comprising: a memory configured to store instructions, and a processor coupled to the memory, wherein the processor is configured to execute the instructions to:

generate a two-dimensional barcode according to Wi-Fi authentication information, wherein the two-dimensional barcode comprises the Wi-Fi authentication information, and the Wi-Fi authentication information is used for authentication prior to connection to the Wi-Fi hotspot device;

and

present the two-dimensional barcode to user equipment UE by using a display screen of the Wi-Fi hotspot device.

30. The Wireless Fidelity Wi-Fi hotspot device according to claim 29, wherein the processor is further configured to execute the instructions to:

dynamically generate a two-dimensional barcode according to dynamically updated Wi-Fi authentication information.

31. The Wireless Fidelity Wi-Fi hotspot device according to claim 29 or 30, wherein the Wi-Fi authentication information comprises at least one of the following items: a service set identifier SSID, an authentication mode, and an authentication password.

32. A Wireless Fidelity Wi-Fi hotspot device, comprising: a memory configured to store instructions, and a processor coupled to the memory, wherein the processor is configured to execute the instructions to:

generate a two-dimensional barcode according to Wi-Fi authentication information, wherein the two-dimensional barcode comprises the Wi-Fi authentication information, and the Wi-Fi authentication information is used for authentication prior to connection to the Wi-Fi hotspot device; and

set the two-dimensional barcode in a management application program that corresponds to the Wi-Fi hotspot device, wherein the management application program is used to provide the two-dimensional barcode for a first user equipment UE, and the first UE is used to present, by using a display screen of the first UE, the two-dimensional barcode to a second UE that needs to connect to the Wi-Fi hotspot device.

33. The Wi-Fi hotspot device according to claim 32, wherein the management application program runs in the first UE.

34. The Wi-Fi hotspot device according to claim 32 or 33, , wherein the processor is further configured to execute the instructions to:

dynamically update the Wi-Fi authentication information; and

dynamically generate a two-dimensional barcode according to dynamically updated Wi-Fi authentication information.

35. The Wi-Fi hotspot device according to any one of claims 32 to 34, wherein the Wi-Fi authentication information comprises at least one of the following items: a service set identifier SSID, an authentication mode, and an authentication password.

36. User equipment, comprising: a memory configured to store instructions, and a processor coupled to the memory, wherein the processor is configured to execute the instructions to:

extract Wi-Fi authentication information comprised in a two-dimensional barcode; and

complete authentication with a Wi-Fi hotspot device according to the Wi-Fi authentication information, and connect to the Wi-Fi hotspot device.

37. The user equipment according to claim 36, wherein the two-dimensional barcode is generated by the Wi-Fi hotspot device, or the two-dimensional barcode is generated by a management device that corresponds to the Wi-Fi hotspot device.

38. The user equipment according to claim 35 or 36, wherein the processor is further configured to execute the instructions to: scan a two-dimensional barcode that is presented on a display screen of the Wi-Fi hotspot device, and extract Wi-Fi authentication information comprised in the two-dimensional barcode.

39. The user equipment according to claim 36 or 37, wherein the processor is further configured to execute the instructions to: scan a two-dimensional barcode that is presented on a display screen of another user equipment UE, and extract Wi-Fi authentication information comprised in the two-dimensional barcode, wherein the two-dimensional barcode is acquired by the another UE from a management application program that corresponds to the Wi-Fi hotspot device.

40. The user equipment according to claim 39, wherein the management application program runs in the another UE.

41. The user equipment according to any one of claims 36 to 40, wherein the processor is further configured to execute the instructions to: before connecting to the Wi-Fi hotspot device, check whether a Wi-Fi function of the user equipment is enabled; and if the Wi-Fi function is not enabled, automatically enable the Wi-Fi function before connecting to the Wi-Fi hotspot device.

42. A computer program product comprising a non-transitory computer-readable medium storing computer executable instructions which cause one or more processors to execute a method according to any one of claims 1 to 3.

43. A computer program product comprising a non-transitory computer-readable medium storing computer executable instructions which cause one or more processors to execute a method according to any one of claims 4 to 7.

44. A computer program product comprising a non-transitory computer-readable medium storing computer executable instructions which cause one or more processors to execute a method according to any one of claims 8 to 15.