What is claimed is:

1. A method for controlling mobile charging devices, comprising the following steps:

searching for information of available mobile charging devices near a location designated by a user;

displaying status of each of the available mobile charging devices on a mobile device of the user;

receiving an order information from the user, the order information including ~~the charging location where the electric vehicle will be charged~~ a mobile charging device selected by the user from the available mobile charging devices and a charging location selected by the user;

determining a navigation route between the mobile charging device and the charging location according to the order information;

navigating the mobile charging device to the charging ~~position~~ location according to the navigation route; and

charging the electric vehicle through a charging interface.

2. The method according to claim 1, further comprising: docking the mobile charging device with the charging interface.

~~3. The method according to claim 1, wherein receiving the order information from the user comprising:~~

~~displaying the available mobile charging devices and available charging locations to the user according to the user input information; and~~

~~receiving the order information from the user, wherein the order information includes the mobile charging device selected by the user and the charging location selected by the user.~~

~~4~~3. The method according to claim ~~3~~1, further comprising:

receiving ~~the~~ user's current location information from the user;

navigating the user to the charging location according to the user's current location information.

~~5~~4. The method according to claim 1, wherein navigating the mobile charging device to the charging ~~position~~ location according to the navigation

route comprising:

identifying obstacles in the navigation route and determining ~~the~~ types of obstacles, wherein the types of obstacles include pedestrians, ~~fixed states,~~ and temporary obstacles; and

determining whether to re-plan the navigation route according to the types of obstacles and mobility of obstacle.

~~6~~5. The method described in claim 1, further comprises the following steps:

receiving ~~the~~ user's credentials from the users;

authenticating the user's credentials.

~~7~~6. The method described in claim 1, wherein the charging interface is a charging auxiliary connection device equipped with a two-dimensional code, and the method further comprising:

authenticating the user after the user scans the two-dimensional code; and

in the case of successful authentication, sending a charging instruction to the mobile charging device.

~~8~~7. The method according to claim 1, wherein charging the electric vehicle through the charging interface comprising:

receiving a suspend charging request from the user;

querying and displaying ~~the~~ charging status of the mobile charging device;

instructing the mobile charging device to suspend charging when the charging ~~state~~ status meets ~~the~~ requirements;

receiving a continue charging request from the user; and

instructing the mobile charging device to continue charging.

~~9~~8. The method according to claim 1, wherein charging the electric vehicle through the charging interface comprising:

receiving an early end charging request from the user;

querying and displaying the charging status of the mobile charging device; and

in the case the charging ~~state~~ status meets the requirements, instructing the mobile charging device to end charging.

~~10~~9. The method according to claim 1, further comprising:

recording ~~the user's~~ charging status and/or charging duration and/or charging capacity of the user; and

calculating ~~the~~ charging fee according to the ~~user's~~ charging status and/or charging duration and/or charging capacity of the user and/or user classification.

~~11. A method executed in a mobile application, comprises the following steps:~~

~~receiving the user's current location information from the user;~~

~~displaying the available mobile charging devices and available charging locations to the user according to the user's current location information;~~

~~receiving the order information from the user, wherein the order information includes the mobile charging device selected by the user and the charging location selected by the user;~~

~~displaying to the user the navigation information for navigating the user to the charging location; and~~

~~displaying to the user the navigation route between the mobile charging device and the charging location, and the current location of the mobile charging device.~~

~~12. The method according to claim 11, further comprising the following steps:~~

~~receiving user credentials and/or scanned two-dimensional code information from the user;~~

~~authenticating the user credentials and/or the two-dimensional code; and~~

~~in the case of successful authentication, charging after the mobile charging device is docked with the charging interface.~~

~~13. The method according to claim 11, further comprising the following steps:~~

~~displaying the charging fee and charging status to the user;~~

~~receiving payment information from users; and~~

~~submiting a payment request according to the payment information and guiding the user to complete the payment.~~

~~14~~10. A system for controlling mobile charging devices, comprising:

a mobile application, configured to perform ~~the~~ following actions:

searching for information of available mobile charging devices near a location designated by a user;

displaying status of each of the available mobile charging devices on a mobile device of the user;

receiving an order information from the user, the order information including ~~the charging location where the electric vehicle will be charged;~~ a mobile charging device selected by the user from the available mobile charging devices and a charging location selected by the user;

sending the order information to ~~the~~ a server;

~~a~~ the server, configured to perform ~~the~~ following actions:

determining a navigation route between the mobile charging device and the charging location according to the order information; and

sending the navigation route to the mobile charging device;

the mobile charging device, configured to perform ~~the~~ following actions:

driving to the charging ~~position~~ location according to the navigation route; and

charging the electric vehicle through ~~the~~ a charging interface.

~~15~~11. The system according to claim ~~14~~10, wherein the mobile charging device is configured to perform ~~the~~ following actions:

identifying obstacles in the navigation route and determine ~~the~~ types of obstacles, wherein the types of obstacles include pedestrians, ~~fixed states,~~ and temporary obstacles; and

determining whether to re-plan the navigation route according to the types of obstacles and mobility of obstacle.

~~16~~12. The system according to claim ~~14~~10, wherein the mobile charging device is configured to perform ~~the~~ following actions:

docking with the charging interface at the charging location.

~~17~~13. The system according to claim ~~14~~10, wherein the mobile charging device is configured to perform ~~the~~ following actions:

separating from the charging interface after charging is complete; and

travelling to ~~the~~ parking location or designated location.

~~18~~14. The system according to claim ~~14~~10, wherein:

the server is further configured to perform ~~the~~ following actions:

recording ~~the user's~~ charging status and/or charging duration and/or charging capacity of the user; and

calculating ~~the~~ charging fee according to the ~~user's~~ charging status and/or charging duration and/or charging capacity of the user and/or user classification;

sending the charging fee to the mobile application; and

the mobile application is further configured to perform ~~the~~ following actions:

displaying the charging fee to the user;

receiving payment information from the user~~s~~; and

submiting a payment request according to the payment information and guiding the user to complete ~~the~~ payment.

~~19~~15. The system according to claim ~~14~~10, wherein the mobile charging device comprises:

an automatic travel module, configured to travel to ~~the~~ a device to be charged according to ~~the~~ a route between the mobile charging device and the device to be charged;

a power module, configured to store and provide electrical energy;

an automatic docking and separation device, configured to perform docking and separation between a first connector and a second connector which is capable of making electrical contact with the first connector, wherein the first connector and the second connector are configured to transmitting electric energy; and

a remote communication module, which is configured to communicate with the server remotely.