chip **20** uses the contact interface **35** to communicate with the application layer **30** via path **55** and uses the external interface **45** to communicate with a card reader **80** via path **85**. Communication path **85** can be a radio frequency signal, optical signal, wireless internet connection, or other communication method well known in the art and external interface **45** is capable of communicating by one or more of these methods.

The application layer **30** consists of an application services module **40** and a control module **50**. The application services module **40** contains or has access to a set of context-based rules. The control module **50** processes the rules and context information to determine one or more virtual cards **21**, **23**, **25**, **27**, or **29** appropriate for a context.

A web interface **60** can be used to interact with a server **70**, which can communicate with the application layer **30** via path **75**. Path **75** can be a standard wireless telephony protocol (such as CDMA), a wireless internet connection, or some other means of wireless communication.

In an example of a consumer using a device **10** to make a purchase at a commercial establishment, the device **10** is brought into the proximity of a card reader **80** within the establishment. Context information is then sent via path **85** from the card reader **80** to the external interface **45** within the device **10**. The external interface **45** passes the information to the microprocessor chip **20**, which recognizes that a virtual card **21**, **23**, **25**, **27**, or **29** with which to make the purchase needs to be selected. The chip **20** sends a signal via path **55** to the control module **50** that a virtual card **21**, **23**, **25**, **27**, or **29** needs to be selected.

The control module **50** consults the application services module **40** for context-based rules related to the context information received from the card reader **80**. The application services module **40** retrieves the rules either internally or from the server **70** and returns the rules to the control module **50**. Using the rules and the context-based information, the control module **50** determines a category of card to use for the purchase and then determines the specific virtual card **21**, **23**, **25**, **27**, or **29** within the category. The control module **50** signals the chip **20** to activate the appropriate virtual card **21**, **23**, **25**, **27**, or **29** to send payment information to the card reader **80**.

If there is not enough context information to select a virtual card **21**, **23**, **25**, **27**, or **29**, an interface on the device **10** can offer the consumer a list of appropriate virtual cards. When the consumer manually selects a virtual card **21**, **23**, **25**, **27**, or **29** from this list, that card sends payment information, via external interface **45** and communication path **85**, to the card reader **80**. The control module **50** can remember the consumer's choice and use the choice to refine the context-based rules. That is, in a similar context in the future, the control module **50** might automatically select the same virtual card that the consumer chose manually or might offer that virtual card to the consumer as the preferred card for the context.

In an example of the device **10** being used in the manner of traditional RFID cards, the device **10** is brought into the proximity of a card reader **80**. The card reader **80** emits a radio frequency signal **85** that is received by external interface **45** and passed on to the chip **20**. The chip **20** consults the application layer **30** in the manner described above to determine an appropriate virtual card **21**, **23**, **25**, **27**, or **29** for the card reader **80**. That virtual card is then activated and sends information to the card reader **80**. The card reader **80** then processes the information appropriately, for example by opening a gate or by deducting a toll from an account.

The web interface **60** can be used to create or modify context-based rules. Rule-related information can be entered through the web interface **60** and stored on the server **70**. The rules can then be retrieved from the server **70** as needed by the application services module **40**. Alternatively, the rules can be transferred from the server **70** to the application services module **40** and stored there. Faster response might be achieved if the rules reside in the application services module **40** rather than the server **70** but the device **10** might require a greater computing capacity in that case. In another alternative, the context-based rules are created or modified directly through an interface on the device **10** and the web interface **60** and the server **70** are not needed.

FIG. **2** is a flowchart illustrating an embodiment of a method for selecting a virtual card based on context. In box **210**, a device containing several virtual cards is brought into the proximity of a card reader. In box **220**, the device receives context information from the card reader. In other embodiments, context information might be inferred from the physical location of the device as determined by a Global Positioning System associated with the device. A set of context-based rules is consulted in box **250** to determine the appropriate virtual card or cards for the context.

Two options are possible in box **260**. In one option, the context-based rules indicate that only one virtual card is appropriate for the context or that one virtual card is more appropriate than the others. In this case, the appropriate virtual card sends the appropriate information to the card reader in box **270**. The device might ask a user for confirmation before the virtual card sends its information.

If the context-based rules indicate that more than one virtual card can be used in the context, the device displays a list of appropriate virtual cards in box **280**. In box **290**, the user selects the virtual card to be used. In box **300**, the selected virtual card sends the appropriate information to the card reader. The device records information about the choice made by the user in box **310**. In box **320**, the context-based rules are updated based on the user's choice so that, in the future, a similar choice might be made automatically in a similar context.

While several embodiments have been provided in the present disclosure, it should be understood that the Context-Based Device Card Selection may be embodied in many other specific forms without departing from the spirit or scope of the present disclosure. The present examples are to be considered as illustrative and not restrictive, and the intention is not to be limited to the details given herein, but may be modified within the scope of the appended claims along with their full scope of equivalents. For example, the various elements or components may be combined or integrated in another system or certain features may be omitted, or not implemented.

Also, techniques, systems, subsystems and methods described and illustrated in the various embodiments as discrete or separate may be combined or integrated with other systems, modules, techniques, or methods without departing from the scope of the present disclosure. Other items shown as directly coupled or communicating with each other may be coupled through some interface or device, such that the items may no longer be considered directly coupled to each but may still be indirectly coupled and in communication with one another. Other examples of changes, substitutions, and alterations are ascertainable by on skilled in the art and could be made without departing from the spirit and scope disclosed herein.

What is claimed is:

1. A system for selecting a virtual card appropriate for a context comprising:

a plurality of virtual cards;