iEat: An interactive restaurant table

Overview

iEat is an innovative **smart restaurant table** that aims at enhancing restaurant customers' experience in terms of entertainment, socialization, food selection and ordering, providing the users with natural interaction with the table itself, as well as with physical objects placed upon its surface.

User **interaction is supported** through moving or placing plates on the table, as well as through infrared lightpens, which are stylus-shaped, LED-based, infrared light (IR) emitters.

Ordering

Target Domains

iEat addresses the food and beverage domain, providing a unique experience to restaurant, cafeteria, and bar customers.

Description

Selecting dishes and ordering

- Customers can explore the restaurant menu: dish thumbnails of the selected menu category are displayed around the empty dish which is nearest to the customer. When the customer selects a menu item, it is projected in the dish.
- The option for ordering the plate is also readily available.
- The order list summarizes all the dishes that have been added by the two diners, providing facilities for removing a dish from the list, view more details for a particular dish, order a specific dish and order all the dishes in the list.

Playing

- The iEat table features interactive games played using the empty plates and the lightpens.
- In the current prototype, a breakout type game has been developed.

Decorating and Communicating

- The iEat table supports facilities for decorating the table surface, through a library of alternative virtual backgrounds (tablecloths), as well as highly customizable drawing toolset.
- Users are able to post their drawings to their Facebook and Twitter accounts.

Playing games

iEat after having been used by two teenagers

Selecting dishes

Posting to social media

Additional Information

Temporary public installations:

- 2016 TRON Symposium, The IoT Action, Tokyo, Japan
- 2014 Taipei International Invention Show & Technomart, Taiwan

iEat web page

http://www.ics.forth.gr/ami/project/ieat-an-interactive-restaurant-table/

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