Documentation

# origin of idea

I have been working in hotels and restaurants and I understand how important an effective electronic reservation system can be, and how using paper based reservation systems can disrupt a busy business.

I noticed that reservation systems are also in demand in other industries and even in daily life, examples include booking activities in tourism industry, booking study rooms in library, or booking facilities in an activity hall.

All these reservation systems share something in common, and they mainly differ in the type of available resources and the time unit. So designing and implementing a general purpose reservation system can be very useful.

# What the control do

The control enables users to manipulate reservations on a calendar view. The calendar is implemented by the form of a table, and the two axes are time and resources respectively. The reservations are displayed as the content of the table.

The main features of the control include:

* Click on an empty cell and create a new reservation
* Click on an existing reservation to modify that reservation
* Delete a reservation
* Validating of the reservation before it is saved. This include:
  + The customer’s name is not empty
  + The start date of a reservation is precede to the end date
  + The dates of the reservation do NOT conflict with any other reservations in the system
* Scroll the calendar to change the view. This include:
  + Scroll one day forward
  + Scroll on day backward
  + Scroll one week forward
  + Scroll one week backward
* Clear all reservations. A warning will pop up and require user’s confirmation

# code reference

The function GetRowColIndex in Util class is referenced from http://stackoverflow.com/questions/15449504/how-do-i-determine-the-cell-being-clicked-on-in-a-tablelayoutpanel