Calendar Application

This document will describe the Calendar App which is used to create Reservation and store the Reservation data into Salesforce Database. The first chapter of this document, user interface, is divided into 3 modules e.g. creating Reservation, storing data into backend database, and displaying data from backend to frontend user interface. Lately, all the essential functionalities will be explained. The software application development from programming point of view will be also depicted in the last section.

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User Interface

The user interface of the Calendar app is straight forward. We have date along column, Room # along row. User can create Reservation from this UI. The empty home page of the Calendar is given below
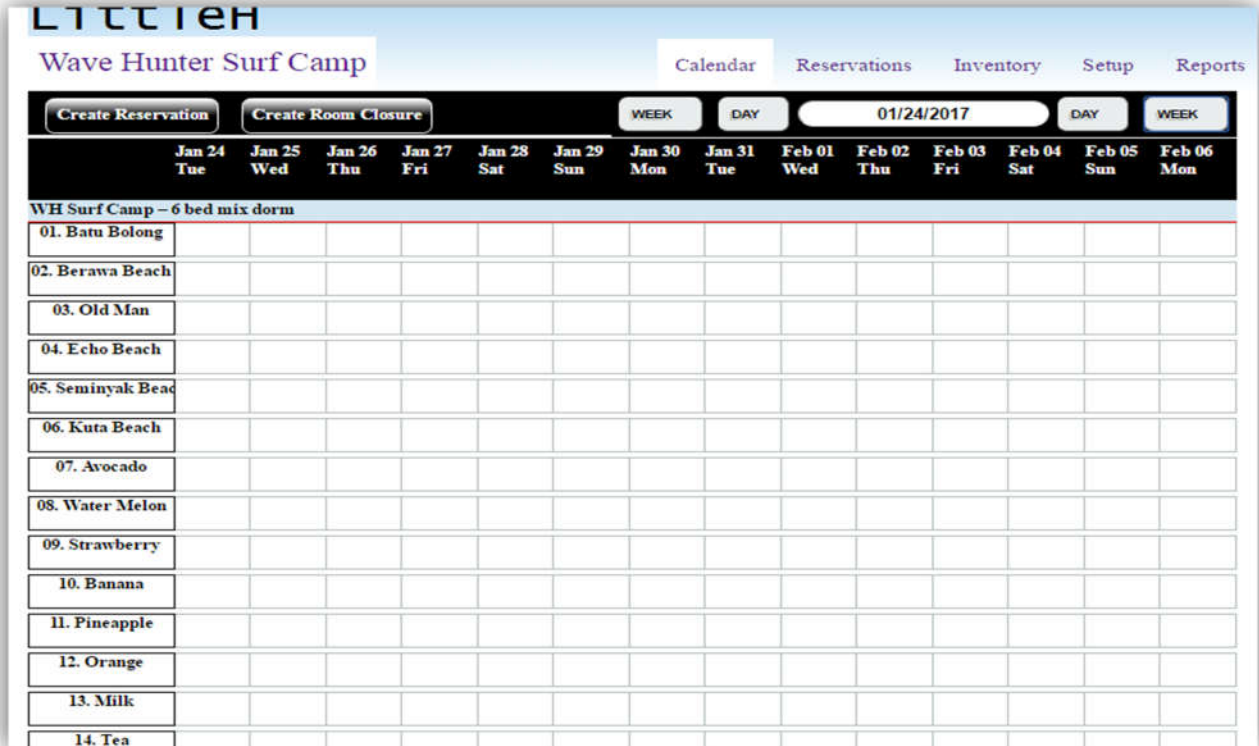

fig1

The Calendar will come with today's date by default. The user can select expected date from datepicker (Red rectangle in Fig2)
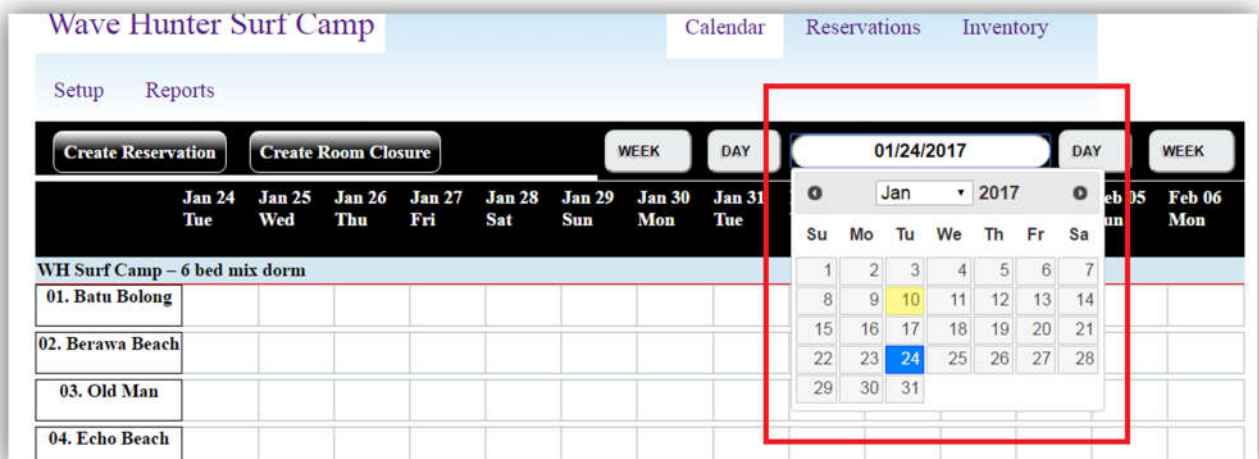

Fig2

There are also four buttons beside the datepicked to change the date to previous week, yesterday, next day, next week respectively. Previous button change the Calendar UI from 24 Jan to 17 Jan (Fig3)
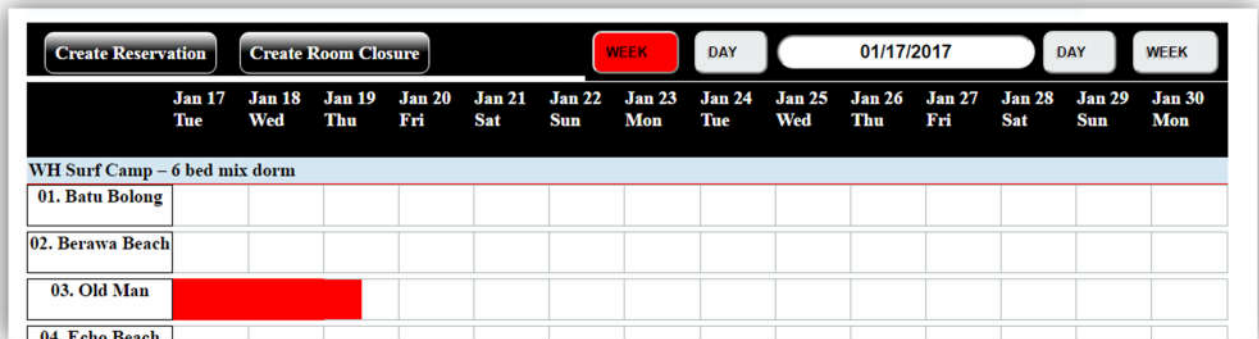

Fig3

Creating Reservation from the Interface

Say, we want to create a Reservation from the UI for Room # WH Surf Camp – 6 bed mix dorm 01. Batu Bolong and Check In Date 12 Jan

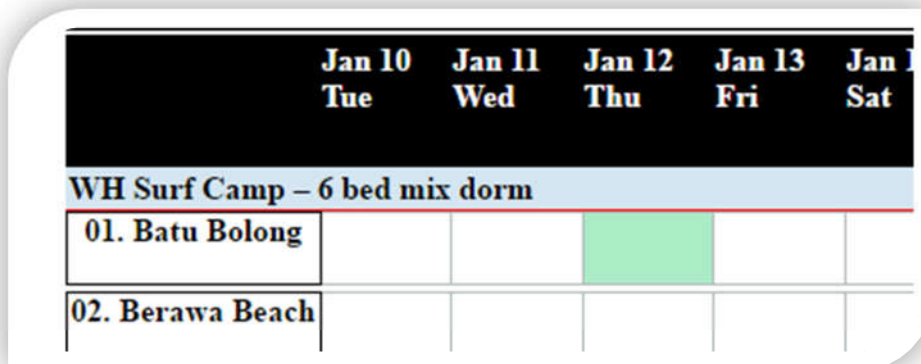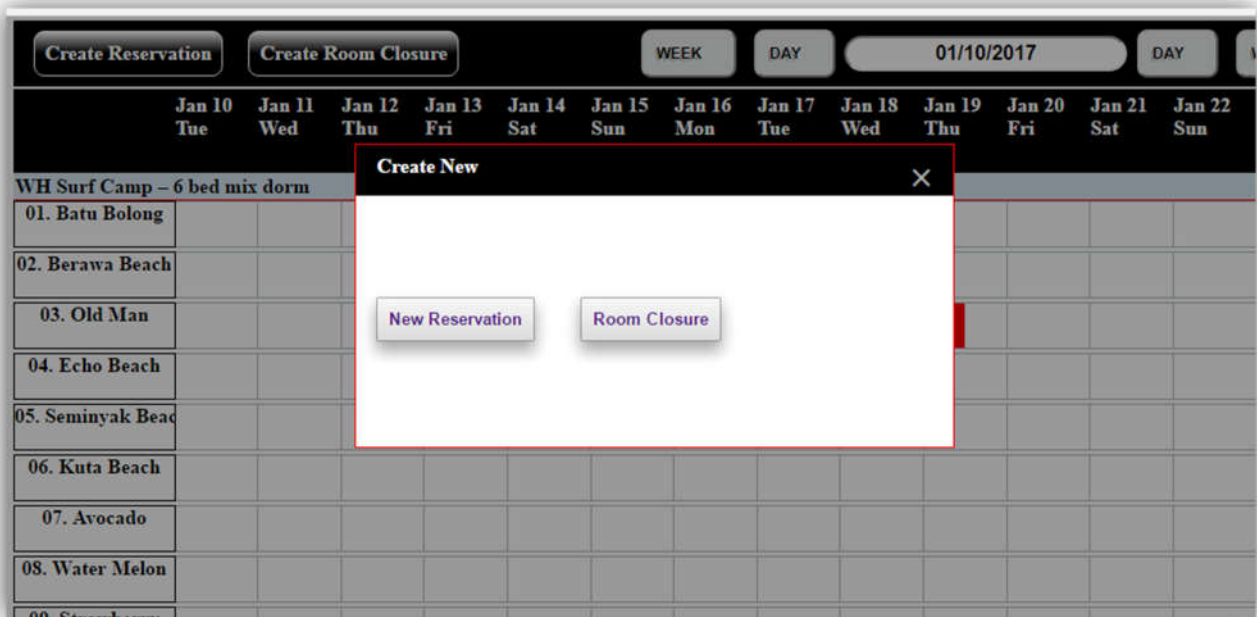Once we click in the corresponding div (fig4), a popup will come (fig5).

fig4

fig5

By clicking **New Reservation**, a Reservation creation page will come with selected Date & Room # prepopulated. In fig6, 12 Jan & Room # Batu Bolong (Red parabola) are autopopulated. By clicking the SAVE button, the newly created Reservation has been stored in to Salesforce Database (fig7).

Fig7

Storing data in the Salesforce Backend

The user will input all data related to a Reservation in the ReservationNew VF page (fig8).

Reservation Object:

The important fields in Reservation Object are Check In, Check Out, Length of Stay, Booking Status.

Room Object:

The Room Object is a Child object of Reservation e.g. Line Item for Reservation.

The related fields are Room Type, Rate Plan, Room #, Number of Adult, Number of Child, Number of Infant, Room Price, Extra, Discount.

Account

The account which is linked to a Reservation.

Payment

All the values from the Booking Summary table are stored in the Payment object.

Fig8 is the UI for creating a Reservation and it's child records & linked Account

fig8: Reservation New VF page

fig8.1: Reservation record detail page

In Fig8.1, Account apple (Black box) has all field values for Account of the Reservation. Room 088 (Red rectangle) is the Child of the Reservation of fig8.1

Fetching Data & Show in the Interface

When a Reservation is created, it will be shown in the Calendar UI ().

fig9: Calendar UI

When user click the Reservation block in the Calendar UI (Red/Green block in the Calendar UI), the detail information of the respective Reservation is popup. The Reservation Detail page for *Trinisha Das* is shown in fig10

fig10

Functionalities

CalendarApp

The CalendarApp visualforce page is the main index file of the webpage from where user can create Reservation. To start with, user will click a cell (Check In date of the Reservation are placed column wise, the Room # are placed row wise). As user click a cell, a popup will appear from where RESERVATION or ROOM CLOSURE can be created. Our main focus is onto creating Reservation & store the information in the Salesforce database.

Buttons

1. Create Reservation: To create Reservation

2. Create Room Closure: To create Room

3. Previous week, day, next day, next week: to change the Dates in the User Interface

Hide all rooms under a room type

When all rooms are hidden by clicking respective bar

If we don't have the Rooms hidden,

fig12

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ReservationNew

Calculate the Length of Stay & Show in the UI as the same time

fig13

When user select Check In & Check Out date, the Length of Stay value is calculated automatically & shown in the UI

$$Length\ of\ Stay = (Check\ Out\ date - Check\ In\ date) + 1$$

Calculate Room Total

The room total (1st row in the yellow parabola) in the Booking summary table is the sum of all room prices (Red rectangle) in the Line Item multiplied by the length of stay (Red circle).

The Room price (Red rectangle) is determined by the picklist value selected in the Rate Plan (Green rectangle)

fig14

fig15

ReservationDetail

Green Reservation & Red Reservation

If the Reservation is *Confirmed*, the Booking section of the Reservation Detail page will be offWhite as shown in fig16

fig16

If the Reservation is *New/In Progress*, the Booking section of the Reservation Detail page will be Light Red as shown in fig17

fig17

Cancel Reservation

Clicking the CANCEL Reservation button in the Reservation Detail page will cancel (delete from the UI & the backend) the Reservation.

fig18: Reservation Detail page

Edit the Reservation

Clicking the EDIT button (fig18) in the Reservation Detail page will redirect user into the EDIT page of the Reservation where user will be able to edit the Reservation (fig19)

fig19: Reservation Edit page