

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

SCS 1210 -Software Engineering II - Group Assignment

A System to be used for the reservation of Circuit Bungalows and CampSites close to the National Parks has to be developed.

Currently, all the reservations are done manually in the Head Office located in Colombo. The proposed system should have the facility to make reservations from the Head Office and also from seven Regional Offices. There are 10 National Parks each having several Bungalows and Campsites. In each Circuit Bungalow, there are 2 rooms with attached toilets, a veranda, and a kitchen.

Reservations are done through the ticketing officers by paying the full amount. There are several ticketing officers attached to the Head Office and the Regional Offices. Reservations are done from 9.00 am to 5.00 pm. A system has to be developed to have the facility for online payments so that visitors can reserve Bungalows or Campsites using credit cards. Ticketing officers do not accept foreign currency. Rates will be the same for foreigners and locals. Rates may change from time to time. Children under 5 years will not be charged and children between 5-12 will be charged half rate. Daily cash collections will be noted and deposited to the bank at the end of each day.

At the time of reservation, the ticketing officer will take the following particulars from the customer, if the customer wishes to proceed with the reservation.

Customer's name, Contact number, NIC No if local, Passport Number if a foreigner, Country, Sex, No. of Adults, No. of Children, Local/Foreign, Type of accommodation, the period of stay, expected checkin date, and mode of payment.

A customer can cancel the reservation at any time thereafter. 10% will be charged if the cancellation is done 48 hours before the checking date and otherwise 50% will be charged. It can be done at the Head Office and Regional Offices through the ticketing officers. Customers who have canceled their reservation can only collect the refund from the same office they made the reservation. It is not possible to cancel the reservations online.

The different payment modes and their discounts are as follows:

Payment Modes
Cash
-No discount

Credit Card -3% eg. Diners, Master etc.

If the customer needs to extend the stay he/she may do so by applying to the person in charge of the Bungalow. He will check the availability from the head office or the regional office. The person in charge of the Bungalows will collect the additional payments if any.

Reservations of Bungalows or Campsites may be canceled due to bad weather. Certain Bungalows or Campsites may be flooded during rainy seasons. When such a situation arises the person in charge of the Bungalow or Campsite will inform the Head Office or the Regional Office. The ticketing officers will publish a message regarding the cancellation on their website and inform the Customers who have already

made the reservations and all the other ticketing officers. They can collect the refund in such cases from the Head Office or the relevant Regional Office.

The proposed system should provide online reservations and have a facility for the ticketing officers, regional managers and directors to find out the reservations, and availability of Bungalows or Campsites for a given day or period.

- Q1) Identify System Actor(s), and Use Cases and draw the Use Case Diagram for the above System.
- Q2) Prepare Use Case Narrative documents for 4 use cases identified. (if 4 members in the group)
- Q3) Identify the Classes and draw the Class Diagram for the above system.
- **Q4**) Draw user interfaces for the 4 use cases identified. (if 4 members in the group)
- **Q5**) Draw sequence diagrams for the 4 scenarios identified. (if 4 members in the group)

State all the assumptions you have made. Indicate the contributions made by each member of the group.

Upload an electronic version (MS Word/PDF) to the VLE (one file per group) before the SE II (SCS 1210) Examination date.
