5COM1053 Computer Science Development Exercise

5COM1061 Information Technology Development Exercise

2020 BEAM Prototype   
GP3 Client’s Sample Data & Scenarios

The following scenarios & sample data are provided for use in your GP3 demo. Data is based on data for the Blastonbury Festival

* **Before** the demo, ensure that all sample data has been loaded into your application’s database and that you have taken the scenario into account.
* **During** the demo, you will be expected to demonstrate that your BEAM meets the system requirements

**Client Priorities (in order of priority)  
Functional Requirements**

* The Blastonbury Festival Manager(BFM) needs to be able to
* maintain information about : agents, bands, stages
* schedule performances
* view the entry log of attempts to enter the stage area performances
* The Security Office needs to be able to:
* maintain band member information
* provide band members with id cards (id card has the same number as the member id)
* authorise band members to enter stage areas for a performance
* There is no need to provide membership registration for members. In this application, this function is performed by the Blastonbury Festival Manager
* Every one (including festival goers) will want to be able to see the schedule of performances by date/band/type
* Entry to a stage area will be controlled by card reader which will determine wheher a band member will be allowed to enter a stage area . However, the operation of card readers is beyond the scope of this prototype.
* When a performance is cancelled, the system should provide information about booking which have already been made so members can be informed
* If a membership lapses because a member has not renewed or is cancelled, no further bookings for that member should be allowed.

**Non-Functional Requirements**

* Your system should ensure that errors are notified and/or- prevented.
* the GUI should allow for good workflow enabling users to perform operations without a detailed knowledge of internal storage details, or by having to search long lists of entries . When operational, the number of members and booking will be large so searching long lists visually is not desirable
* BEAM must ensure the security of the system. The recommendation is a login system with different facilities available depending on whether the user is the director or a member (but this is low priority)

The data provided below DOES NOT ALWAYS CONFORM to the requirements or constraints either of a DB or of CodeIgniter. You are responsible for the appropriate design of DB tables

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Some Client Sample Data for Main Tables** | | | | | | . |  |
|          All data given below should be stored in your application BEFORE the demonstration | | | | | | |  |
|          It has been provided by clients AND may NOT be in the required RDB, or CodeIgniter format | | | | | | |  |
| Make sure you design your DB tables, and just use this data to populate them | | | | | | |  |
| Agent | | | | | | | |
| **Agent No** | **Given Name** | **Family name** | **Contact** |  |  |  |  |
| **111** | **John** | **Ripov** | 0203 4567890 |  |  |  |  |
| **222** | **Mary** | **Dancing** | 0765 4320243 |  |  |  |  |
| **333** | **Anil** | **Rating** | 0121 2130321 |  |  |  |  |
| **444** | **Lim** | **Popo** | 0911 2345432 |  |  |  |  |
| **555** | **Mary** | **Ripov** | 0203 4567890 |  |  |  |  |
| Band | | | | | | | |
| **Band Name** | | **Description** | | **Agent** | |  |  |
| **Green Dragons** | | Heavy Rock | | Mary Dancing | |  |  |
| **Wellies** | | Easy Listening | | Anil Rating | |  |  |
| **Lazy Dancers** | | Garage | | John Ripov | |  |  |
| **The Vultures** | | Easy Listening | | Anil Rating | |  |  |
| **Future Explosion** | | Heavy Rock | | Lim Popo | |  |  |
| **Killers** | | Heavy Rock | | Mary Ripov | |  |  |
|  | |  | |  | |  |  |
|  | |  | |  | |  |  |
| **Members** | | | | | | | |
| **Id** | **Title** | **Given Name** | **FamilyName** |  | **Job Type** | **Band** | **Status** |
| 1111 | Ms | Helen | Miranda | 21/12/1987 | Lead Guitar | Green Dragons | Active |
| 1234 | Mr | Jose | Jose Alves | 27/12/1977 | Bass Guitar | Green Dragons | Active |
| 1333 | Dr | Vito | Gelato | 06/01/1998 | Voice Coach | Wellies | Active |
| 1344 | Dr | Guy | Redmond | 09/02/1988 | Make -up | Killers | Active |
| 1444 | Ms | Maria | Partou | 11/03/1994 | Vocals | Wellies | Active |
| 2111 | Ms | Lindsay | White | 16/03/1999 | Dancer | Future Explosion | Cancelled |
| 4545 | Ms | Lee | Ping | 16/03/1999 | Lead Guitar | Lazy Dancers | Active |
| 5665 | Ms | Sing | Song | 15/07/1983 | Vocals | The Vultures | Active |
| 2121 | Mr | David | Wikinson | 18/03/2001 | Backing | The Vultures | Cancelled |
| 3333 | Ms | Olenka | Sama | 12/12/1977 | Sound Tech | Killers | Active |
| 7271 | Mr | Dan | Dreary | 12/12/1978 | Make up | Wellies | Active |
| 5555 | Mr | Tom | Tumbling | 13/07/2002 | Drums | Wellies | Active |
| 6666 | Mr | Fingers | Malone | 14/09/1987 | Guitar | Wellies | Active |
| 1234 | Mr | Lai | Zee | 14/09/1979 | Roadie | Wellies | Active |
|  |  |  |  |  |  |  |  |
| **Stage** | | | | | | | |
| **No** | **Name** | | **Back stage Capacity** |  |  |  |  |
| 1 | John Peel | | 20 |  |  |  |  |
| 2 | The Bowl | | 10 |  |  |  |  |
| 3 | Main | | 30 |  |  |  |  |
| 4 | The Oasis | | 20 |  |  |  |  |
| 5 | Jam Session | | 3 |  |  |  |  |
| 6 | Premium | | 50 |  |  |  |  |
|  |  | |  |  |  |  |  |
|  |  | |  |  |  |  |  |
| **Performance** | | | | | | | |
| No | Stage | Date | Time | Band |  | incomplete |  |
| 1 | 1 | 25-Jun | 10 | Wellies |  |  |  |
| 2 | 2 | 25-Jun | 18 | Wellies |  |  |  |
| 3 | 1 | 27-Jun | 12 | Vultures |  |  |  |
| 4 | 3 | 26-Jun | 18 | Wellies |  |  |  |
| 5 | 3 | 26-Jun | 15 | Vultures |  |  |  |
| 6 | 1 | 25-Jun | 13 | Killers |  |  |  |
| 7 | 5 | 26-Jun | 13 | Wellies |  |  |  |
| 8 | 6 | 27-Jun | 13 | Vultures |  |  |  |
| 9 | 2 | 26-Jun | 13 | Killers |  |  |  |
| 10 | 4 | 25-Jun | 16 | Dragons |  |  |  |
| 11 | 1 | 27-Jun | 14 | Wellies |  |  |  |
| 12 | 4 | 25-Jun | 17 | Dancers |  |  |  |
| 13 | 6 | 26-Jun | 18 | Dragons |  |  |  |
| 14 | 4 | 26-Jun | 19 |  |  |  |  |
| **Entries Allowed – this is not necessarily a table but used for testing** | | | | | | | |
| No | Performance id | Member id |  | Notes |  | incomplete | MBSD |
| **1** | **1** | **1444** |  | wellies | stage 1 | 25-Jun | Basic |
| **2** | **1** | **5555** |  | wellies | stage 1 | 25-Jun | yyy |
| **3** | **1** | **3333** |  | wellies | stage 1 | 25-Jun | yyy |
| **4** | **2** | **5555** |  | wellies | stage 2 | 25-Jun | yyn |
| **5** | **2** | **6666** |  | wellies | stage 2 | 25-Jun | yny |
| **6** | **4** | **1444** |  | wellies | stage 3 | 26-Jun | ynn |
| **6** | **11** | **1444** |  | wellies | stage 1 | 25-Jun | xnyy(T) |
| **7** | **6** | **1344** |  | killers | stage 1 | 25-Jun | xnyy |
| **8** | **8** | **5665** |  | vultures | stage 6 | 27-Jun | xnyn |
| **9** | **12** | **4545** |  | dancers | stage 4 | 25-Jun | xnny |
| **10** | **10** | **1234** |  | dragons | stage 3 | 26-Jun | xxnn |

**Some Basic User Stories/Scenarios**

Most of the scenarios below are "happy day" scenarios. You should also consider error situations. You should assume that all of the data provided in Client Sample data has been loaded in to the DB

* Selby Date (Blastonbury Festival Manager) wants to add:
* a new agent: Mary Easter 0123 4567890
* a new performance for a new band "Suspicion" (Agent Lim Popo) for stage 1 on 25st June at 19.00
* Green Dragons withdraw, cancel their performances
* The following entries attempted:
* Maria Partou to stage 1 on 25th June – allowed
* Maria Partou to stage 2 on 25th June – allowed
* Maria Partou to stage 1 on 27th June – allowed
* Maria Partou to stage 4 on 26th June – allowed
* Maria Partou to stage 5 on 25th June - denied
* Olenka Sama gets sacked for incompletence, amend Wellies and cancel her authorisations
* John Knot – drummer added to The Vultures should be allowed to enter stages for their performances
* A fan wants to know all the performances by the Wellies
* Another fan wants to know all of the performance on 25th Jun
* Stage 4 is water-logged in a storm, move all performances to stage 3 on the same days