Project Proposal

Online Portal for DOME Concessions

1. Business description (20 pts)

Describe the business based on the answers to the following questions. What industry does this organization reside? What products or services does it provide? What are its general business functions? Answering these questions will help you think further of what data need to be stored in the database and what data questions the users commonly ask.

I am planning a project for DOME Concessions Organization in Syracuse University for Shift Scheduling using an Online Portal along with keeping track records of employees, their swipe in and swipe out times, payment as per the games scheduled to better manage the Shift schedules through a database. The project would benefit Dome to manage, track the employees, staff in a more robust and efficient manner rather than manually sending mails for shifts and making schedules based on confirmations received from the employees. It would save time, effort of the staff for scheduling.

Dome Concessions is involved in managing games being held in Syracuse including Football, Basketball, and High School games. All the services from food, drinks, and utilities are managed for the games being held. So it needs employees to work on game days to make customers who come to watch the game going home satisfied with the services offered to make it a success. In order to do that, it needs employees as per the crowd number expected to deliver the services in a professional manner. Currently there is no online portal to do scheduling of shifts. Scheduling can be done automatically by the employees picking up the shifts from the portal, using database for keeping track of employees, their timings, payments all at once. Employees can see the open shifts posted by staff for the game and pick it as per the convenience including the dropped shifts. Duration of different shifts including probable start and end time of shift for the different type of shift like food, beer. Entities involved include Employee, Managers/Staff, Organization, Shift Schedules, Track Record, Payment etc. which can be tracked in one system using the database.

2. Problem statement (30 pts)

Describe the data management problem based on the answers to the following questions. What data management problem are you trying to solve? What is the current solution? Why is the current solution not adequate? Justify the need for new data and databases in support of the business.

The proposed database would solve mainly 2 problems. Shift Schedule and track of employees minimizing human error, effort and time with consolidation of all the systems for DOME Concessions. Currently the scheduling is done through emails sent out before the game day and schedules being made as per the confirmations from the employees manually. This would bring the integration of timing, scheduling of shifts in 1 database system online.

1. Shift Schedules are being made manually based on email confirmation of the employees. All the effort is done manually to schedule and make sure all report to work on time. For example, there are times where the employees reply more than once and they are scheduled twice or thrice which can be major problem. 1 person replying 2 times gets scheduled twice for same time same shift which makes it difficult to manage the schedules.
2. Some employees may not show up to work after confirming their shift. There can be a mechanism where-in the employees can drop shifts prior to some deadline and will be given points for showing up late or no show with a database system in place integrating all these issues with manual work to an automated system to make it seem flawless.

There has not been any effort to address these issues related to shift scheduling, time tracking done prior to this. There is a need to have a centralized system in place where all scheduling related activities are performed online without much of human interaction leading to errors with double scheduling, manual work going in this rather than an online portal with database taking care of all the issues highlighted to achieve better satisfaction among customers and the DOME. This solution will thus lead to less effort, time in manual work on employees than on customers.

3. Proposed solution (30 pts)

Describe a potential solution to the data management problem. Describe the project scope by answering the following questions. What business functions will be considered in the proposed system? What functions are considered but not included? Why? Describe the primary business objectives of the proposed system.

The Dome Concessions manages all games and activities being in DOME with employees and managers working close together. The proposed database system will integrate scheduling, management of employees and their information going ahead with minimum manual interaction. The database will have information about employees, games, schedules, payment etc. thereby reducing time, labor and money while keeping track of the minute details helpful in the future.

The functions considered in the design are:

1. For the DOME concessions Organization: To store, manage and retrieve information about the employees, supervisors, managers.
2. For Employees: To automate shift scheduling procedure, game details and timings in advance for efficient management, avoiding double shift assignments.
3. Games Schedule: To store game details in advance with estimated crowd details for better employee, goods and services maintenance.
4. For the Backend records: To be able to track employees under DOME for their timings, payments, discipline.

Entities and the Attributes:

1. DOME Organization: Name, ID, Location
2. Employees: EmployeeID, EmployeeName, Address, ContactNo, Email ID
3. Managers: ManagerID, ManagerName, ContactNo, Email ID, OfficeLocation, OfficeHours
4. Games: MatchID, Teams, Key Players, Crowd Number, Game Type
5. Shifts: ShiftID, Shift Type, Shift Time, Shift Duration, Available Shift, Dropped Shifts, Total Shifts
6. Schedule: Employee Name, Stand Number, Employee Shift
7. Records: Ratings, Disciplinary points, Efficiency

The proposed database design is not for a corporate but for the DOME Concessions to manage the resources efficiently through an online portal rather than a manual shift assignment, calculation of shifts available etc. where business is not the aspect to look for but to enhance the overall experience of the employees, managers, customers involved so there are no business cost improvements related issues addressed rather time and effort of the staff is saved avoiding human errors and have a centralized system for all the management that goes into the games.

4. Users (20 pts)

Who are the users of your database system? Do all of them have equal access to the data? What data questions do they need to answer by querying the database?

The users of the proposed database will be Dome Organization, Employees, Managers, Administrative team.

1. The Organization should be able to access all the information regarding employees, managers, schedules, working schedules. The questions that the organization would need to answer can be: 1. How many employees work in DOME? 2. How are the activities carried out based on schedules, managing the events? 3. They can even see the feedback from the customers if included in the database to decide some structural/financial changes needed? 4. Reviewing the managers and employees regularly of their performance? 5. Are they able to fulfill the expectations that staff is having from them?
2. The Employees should be able to access the information related to available & dropped shifts, schedules, games details. They would want to query the database to find answers to questions such as 1. Available shifts for the game 2. Time in & Out along with payment details 3. Their schedules 4. Game details for future games.
3. The Managers would be given rights to access the information regarding employees working, their track records, shifts to be opened for the games. They query the database to answer the questions like 1. How many employees have taken shifts and how many more are needed. 2. Are the employees working efficiently & on-time. 3. Crowd Expected for the games. 4. Disciplinary points system
4. The Administrative Team needs to have the right to see the information regarding the time in and out, payment issues, employee managers details. By querying database they would be able to address issues related to 1. Who are the point of contact people for certain shifts, whom to contact during any issue. 2. Sending out notifications regarding shifts. 3. Manage the locations, timings of training imparted prior to working.