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## **Project Proposal: Database Plan Summer Camp Operations Management System**

### **Project Overview:**

The 'Summer Camp Operations Management System' is designed to keep track of the administration, staff, students, course, buildings, forms, scheduling, and fees.

### **Project Description:**

The Summer camp management system allows authorized members to access the records of registered students. It can be used by all sort of educational organizations around the world for when kids are planning to take Summer or short-term school activities.

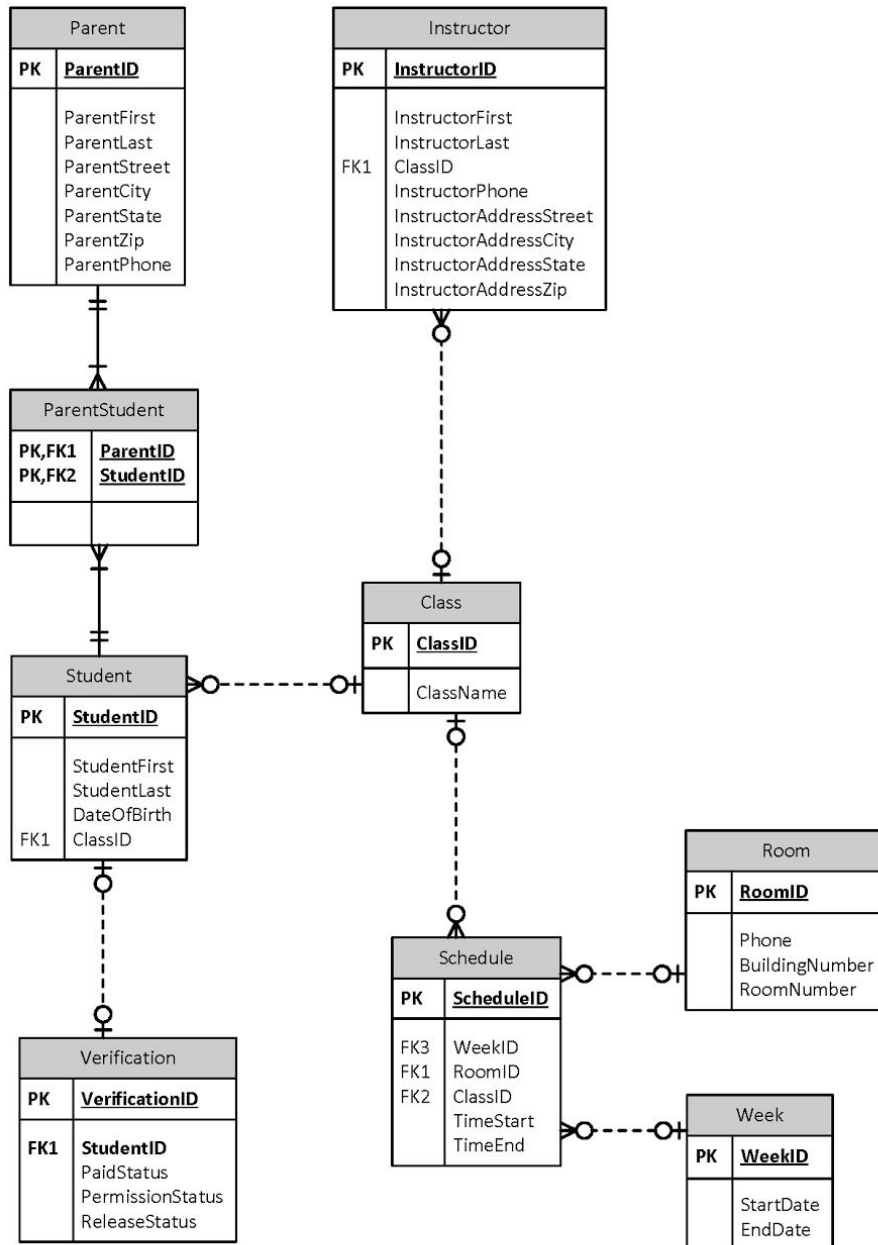
### **Purpose of The Project:**

The system maintains records of students, the courses, and activities on which they are registered. The system is also required to provide info regarding the teachers that are assigned to specific classes and the locations that these courses will be taken place. Furthermore, administrators and staff should be able to retrieve information for a particular course or a specific student. Only faculty and administrators are allowed to make changes in the data. Finally, students and parents will be given access to view data that are specific to student courses and activities.

### **Project Integration:**

The project will be strictly a database store. However, it will be designed in a way that it can be utilized if needed to expose a user interface that users can access to view classes information quickly. Also, there is a possibility to add web services that can be used by a school system to retrieve historical data in real time to find ways to improve or expand the curriculum or student activities during the Summer.

## Project Database Diagram:



### Project Deliverables against Business Requirements:

Business Problems	Views	Stored Procedures	Triggers	Functions
Develop reports		Stored procedures to generate reports based on activities, and courses		
Verification forms and accident release			Triggers to notify when forms are out of date	
Verification forms and accident release			Triggers to notify malformed or unsigned forms	
Payment verification			Triggers to notify when payments were not received	
Student's contact information			Triggers to encrypt PII information	
Staff, and student's location	Views allowing administrators to get info about staff and students location based on the classroom			
Week scheduled activities		Stored procedures to provide historical data regarding activities for a specific week during a specific		

		year		
Class finder	Views to provide classes latitude and longitude			
Room availability and purpose		Stored procedures to provide info on Room size, and equipments		
Parent/Student class activities view	Views for a student/parent to check on classes			
User roles and responsibilities				Function given info regarding access based on whether the user is staff, administrator, parents or students

Note that the list above is just proposal of possible views, stored procedures, triggers, and functions. We will, however, pick at least two scenarios for each of the viable options for the actual implementations.

## Resource Planning

Member	Tasks	Deliverables
Robert Marshall	Project sponsor - Define project visions	Implement database objects, population scripts, triggers
Ram Ganesan	Technical lead - Review and sign off on all technical scripts	Implement stored procedures, functions and triggers
Anuj Joshi	Business owner - Liaison between the team and TA/Teacher	Implement stored procedures, triggers and views
Pierre Augustamar	Project Manager - Manage project and set guidelines	Implement stored procedures, functions, views and triggers

Tasks and deliverables were set based on team members' skills and interests. Note that overall everyone has/will equally contribute to this project.

## System Resource

Resource	Description	Servers
Test Server	Install scripts under development for testing	Local machine
Prod Server	Install final scripts to be used for final presentation	chaffin01.ischool.uw.edu
Source Control Server	Maintain each scripts on a controlled environment	Google drive for test scripts Github for final scripts

Individual development scripts will be shared using Google Drives. However, the final and signed off scripts will be maintained in Github.

**Project Estimation:**

Tasks	Members	Estimated Effort
Implement database objects, and population scripts	Robert Marshall	12 hours
Implement stored procedures, functions and triggers	Robert Marshall, Ram Ganesan, Anuj Joshi, Pierre Augustamar	30 hours
Review and Testing scripts	Robert Marshall, Ram Ganesan, Anuj Joshi, Pierre Augustamar	8 hours
Bug fixes if any	Robert Marshall, Ram Ganesan, Anuj Joshi, Pierre Augustamar	4 hours
Deploy and maintain scripts	Pierre Augustamar	2 hours
<b>Total</b>		<b>56 hours</b>

**Project Schedule:**

Tasks	Start Date	End Date
Making Project Specification	11/18	11/18
Complete database objects, and population scripts	11/20	11/22
Complete Stored procedures, functions, triggers and views	11/27	11/29
Testing	11/30	12/2
Fix and refactor any issues	12/3	12/4
Deploy to prod	12/5	12/6

Note that the estimation and schedule are not set in stone. Both are just merely estimation and are subject to be changed or adjusted based on needs.

### Project Risks

Risk	Mitigating Strategy
Poor team dynamics	<ul style="list-style-type: none"><li>• Select a facilitator to maintain team activities and to keep everyone on track</li></ul>
Planned time off	<ul style="list-style-type: none"><li>• Each person should list out expected time off by 11/19.</li><li>• All scripts will be stored in github and can be taken over by anyone in the group if needed</li></ul>
High turnover on the project team	<ul style="list-style-type: none"><li>• Improve team cohesion through regular milestone meetings</li><li>• Team members to provide status of their progress on a regular basis</li></ul>
Overly optimistic schedule	<ul style="list-style-type: none"><li>• Buffer time is added into the schedule in case of unforeseen personal reasons</li><li>• Properly set schedule and tasks based on skills and availability</li></ul>
Project not completed on time	<ul style="list-style-type: none"><li>• Not an option</li></ul>

We do not anticipate that there will be any significant roadblocks, but these risks are listed out as potential issues that may arise.