Project Description

The objective of this database is to make a user interface that has the ability to create, view, and/or update events such as classes, extra-curricular activies, meetings, etc... that take place in Anne Belk Hall. This database's main use will be to provide convenience and accessibility when checking for room and/or computer availability for scheduling events or personal use. Hopefully, with the assitance of the faculty, we will be able to improve or recreate the building map provided online with additional support and features.

Our project's database will keep a schedule of the events that occur in each room at what day and time. This database will keep track of event managers along with their scheduled events allowing the managers to add, update, and/or delete their events. Managers will be limited to adding events to rooms that they have permission to access through the use of the permissions field. This permissions field will act as a modified version of unix permissions (ex: 777, 775, etc...).

We wish to create a versatile framework for this database in order to maybe expand this project to other buildings and events. Hopefully we will be able to complete this project and present a superior product to handle event/room scheduling management.

Tentative Plan

March 20	Phase 1 due
March 24	Python database framework due
April 3	Django webserver framework due
April 9	Database managing web service due
April 16	User interactivity views and templates due
April 23	Visual representation of rooms and layout due
April 30	Database authentication and visualization due
May 1	Full database project due

Project Questions

We will be meeting with Paul Wilson (the administrative assistant for the CS Department) to ask questions about specifications and valued features for our project. We will be meeting him at 3:00 PM on 3-25-2015 in Anne Belk Hall room 312P. Here are a few of the questions we came up with before the meeting.

- Do you have a pre-existing database we can view and consult?
- What sort of specifications do we need to meet to validate this project?
- Can we have access to scheduling records for classes and activities?
- What features would you appreciate from this database?
- Have there been past efforts to create a similar database? If so, what problems occured?

Member Responsibilities

Stephen Bunn (*Team Leader*, *Development Manager*)

Build and maintain an effective team.
Motivate all team members to work aggressively on the project.
Resolve all the issues team members bring to him/her.
Keep the instructor fully informed about the team's progress.
Perform effectively as the team's meeting facilitator.
Produce a superior product.
Fully use the team members' skils and abilities.

Chun Zheng (*Support Manager*)

Ensure the team has suitable tools and methods to support its work (software, etc...)
No unauthorized changes are made to baselined products.
All team's risks and issues are recorded in the issue-tracking system and are reported each week.

Austin Mann (*Planning Manager*, *Group Communicator*)

Produce a complete, precise, and accurate plan for the team and every team member.
Accurately report team status every week.

Walt Scarboro (*Quality/Process Manager*)

All team members reported possible problems or defects and they are recorded in the project notebook.

Software and Utilities

Python	High level programming language used as our host language.
Django	Python web framework used as our user interface framework.
Foundation	HTML bootstrapping framework.
Sqlite3	Database framework to create and manage our database.
SqliteMan	3rd party program idrf to debug our database.

Database Schema

BUILDING

buildingID	name	roomcount	floorcount

ROOM

roomID	capacity	name	type	permissions	available

EVENT

eventID	name	timestart	timeend	datestart	dateend	yearly	monthly	weekly	daily

MANAGER

managerID	namefirst	namemiddle	namelast	email	permissions	sex

PERIPHERAL

peripheralID	name	working	permissions

Database Catalog

BUILDING

Name	Data Type	NOT NULL	Primary/Foreign
buildingID	INTEGER	NOT NULL	Primary
name	TEXT	NOT NULL	
roomcount	INTEGER	NOT NULL	
floorcount	INTEGER	NOT NULL	

ROOM

Name	Data Type	NOT NULL	Primary/Foreign
roomID	INTEGER	NOT NULL	Primary
capacity	INTEGER		
name	TEXT	NOT NULL	
type	TEXT		
permissions	INTEGER	NOT NULL	
buildingID	INTEGER	NOT NULL	Foreign

EVENT

Name	Data Type	NOT NULL	Primary/Foreign
eventID	INTEGER	NOT NULL	Primary
name	TEXT	NOT NULL	
timestart	REAL	NOT NULL	
timeend	REAL	NOT NULL	
datestart	REAL	NOT NULL	
dateend	REAL	NOT NULL	
yearly	INTEGER	NOT NULL	
monthly	INTEGER	NOT NULL	
weekly	INTEGER	NOT NULL	
daily	INTEGER	NOT NULL	
managerID	INTEGER	NOT NULL	Foreign
roomID	INTEGER	NOT NULL	Foreign
buildingID	INTEGER	NOT NULL	Foreign

MANAGER

Name	Data Type	NOT NULL	Primary/Foreign
managerID	INTEGER	NOT NULL	Primary
namefirst	TEXT	NOT NULL	
initialmiddle	TEXT		
namelast	TEXT	NOT NULL	
email	TEXT	NOT NULL	
sex	TEXT		
permissions	INTEGER	NOT NULL	

COMPUTER

Name	Data Type	NOT NULL	Primary/Foreign
computerID	INTEGER	NOT NULL	Primary
name	TEXT	NOT NULL	
working	INTEGER	NOT NULL	
permissions	INTEGER	NOT NULL	
roomID	INTEGER	NOT NULL	Foreign

Database ER Diagram