

Hospital Rooms database and it's interface

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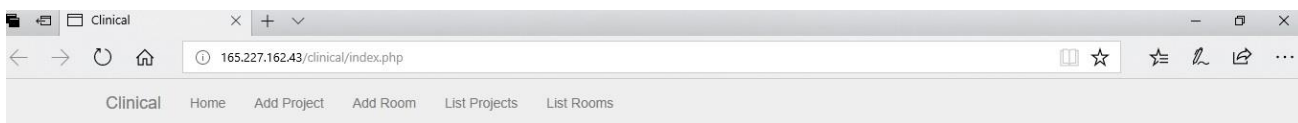
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Room datasheet system implemented here ensures effective communication between customer needs, designer specifications and the responsible authority for building the hospital. The implemented interface program offers different stages for treating with creating new project, creating new room datasheet, viewing the created rooms and projects and retrieving count of objects needed as final result. Room data sheet database gives a detailed description of all the finishes, fixtures and fittings, mechanical and electrical requirements that will be required for each room in a project. It's database created by MySQL and the interface created as a server it's back end by PHP and frontend by HTML.

1.Program Explanation

1.1Add Project



Project Form

165.227.162.43/clinical/add_project_form.php

Clinical Home Add Project Add Room List Projects List Rooms

PROJECT FORM

Project No:

Project Name:

Owner:

Contractor:

Date:

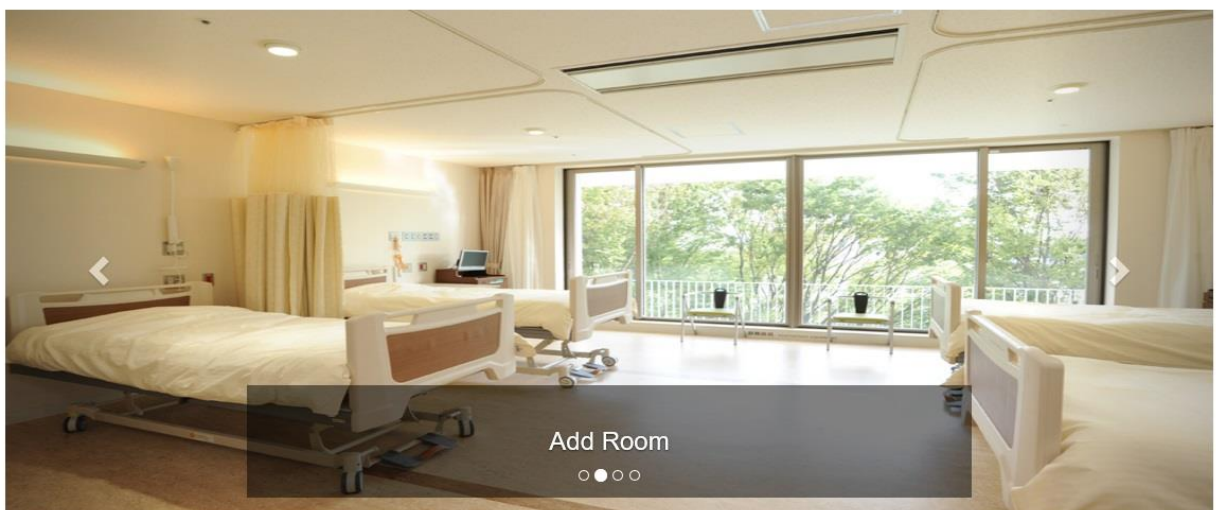
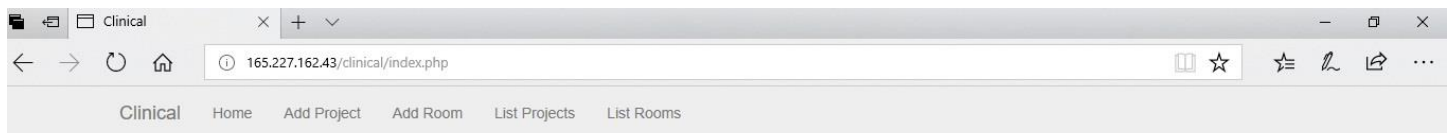
mm/dd/yyyy

Address:

Go

Here the details of new project are added from it's name, owner, contractor, date of contraction beginning, address of hospital and project number.

1.2 Add Room



ROOM DATA SHEET

OPERATIONAL DATA

ID:

Project Name:

Area in m:

Hours of use:

Days of use:

Function:

Occupancy normal:

Occupancy max:

ARCHITECTURE

Door Width:

Windows:

Ceiling Height:

Racks:

Hooks:

Boards:

Tracks:

Rails:

Mirrors:

Ceiling Finishes:

Floor Finishes:

Wall Finishes:

Special Considerations:

Special Storage Requirements:

Room Data Sheet

165.227.162.43/clinical/add_room_form.php

Clinical Home Add Project Add Room List Projects List Rooms

COMMUNICATIONS DATA

☐ Bedhead Consoles
 ☐ Closed Circuit TV (Educational)
 ☐ Computer Terminal
 ☐ Computer Printer
 ☐ Patient Monitoring
 ☐ Telephone
 ☐ Dialation
 ☐ Interscom
 ☐ Television
 ☐ Data
 ☐ Security TV
 ☐ Access Control
 ☐ Pocket Paging
 ☐ Public Address

Call System:

☐ Emergency
 ☐ Audio
 ☐ Audio Visual
 ☐ Code Blue (Cardiac)
 ☐ Code White (Panic)

ELECTRICAL DATA

Clock System:

☐ Synchronized
 ☐ Stand Alone
 ☐ 24 Hour
 ☐ 12 Hour
 ☐ Elapsed Time

Imaging:

☐ Film Reader

Lighting:

☐ Ambient
 ☐ Task
 ☐ Examining
 ☐ Colour Corrected

Alarm and Detection:

☐ Fire Alarm System
 ☐ Intrusion Detector
 ☐ Heat Detector
 ☐ Smoke Detector
 ☐ Gas Detector

Lighting Control:

☐ Wall Switch
 ☐ Occupancy Sensor
 ☐ Daylight Sensor
 ☐ Dimmer
 ☐ Bedhead

Door:

☐ Magnetic Door Position Switch
 ☐ Electronic Door Locking Hardware
 ☐ Automatic Door Opener
 ☐ Request-to-exit for Door Shunt

MECHANICAL DATA

Temperature:

☐ Standard (23°C)
 ☐ Special

Humidity:

☐ Standard (55% min)
 ☐ Special

Room Pressurization:

☐ Equal
 ☐ Negative
 ☐ Positive
 ☐ Reversible

PLUMBING DATA

Drainage:

☐ Sanitary
 ☐ Grease
 ☐ Plaster
 ☐ Acid
 ☐ Oil
 ☐ Floor Drain
 ☐ Radioscopes
 ☐ Solvents
 ☐ Housekeeping Vacuum

Water:

☐ Domestic Hot Water (82°C)
 ☐ Domestic Hot Water (86°C)
 ☐ Domestic Hot Water (43°C)
 ☐ Domestic Cold Water
 ☐ Softened Water
 ☐ Fire Suppression Sprinkler
 ☐ Distilled Water (Localized)
 ☐ Dialysate Water (Localized)
 ☐ De-ionized Water (Localized)

Fixtures and Fittings:

☐ With Overboard
 ☐ Plaster Sink
 ☐ Cup or Drip Sink
 ☐ Urinal
 ☐ Eye Wash
 ☐ Standard Bath Tub
 ☐ Special Bath Tub (specify)
 ☐ Wheelchair Sink
 ☐ Flushing Rim Sink
 ☐ Toilet
 ☐ Bidet
 ☐ Standard Shower
 ☐ Floor Drainage Point
 ☐ Floor Sink
 ☐ Pediatric Toilet
 ☐ Safety Shower

Gas:

☐ Medical Vacuum
 ☐ Medical Air
 ☐ Medical Nitrogen
 ☐ Medical Oxygen
 ☐ Medical Nitrous Oxide
 ☐ Natural Gas
 ☐ Laboratory Vacuum
 ☐ Laboratory Compressed Air
 ☐ Shop Compressed Air

Accessories:

☐ Bed Pan Sprayer
 ☐ Hand Shower Attachment
 ☐ Foot Operated
 ☐ Hands Free Operation (eg. Infra-red control)

Go

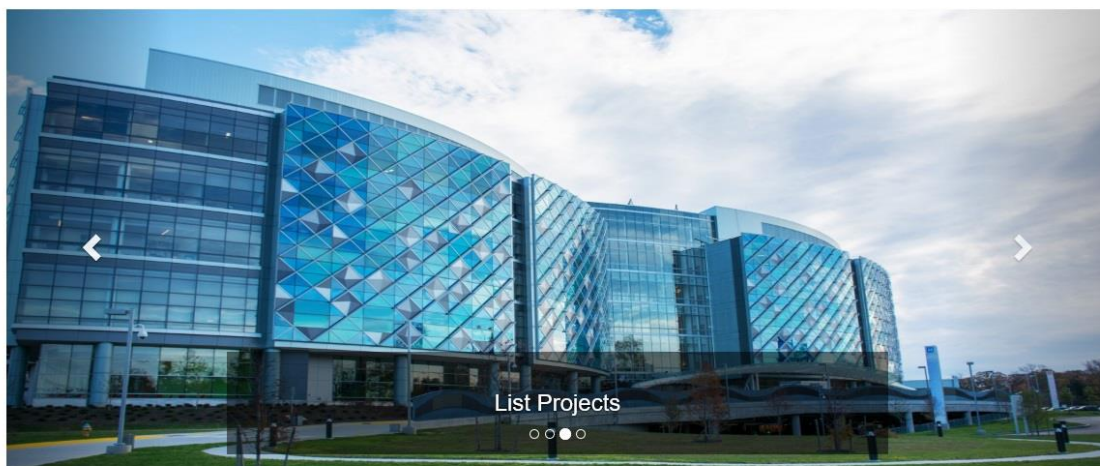
This stage allows the user to fill in room data from wide variety of options for operational, architecture, communications, electrical, mechanical and plumbing data and then after clicking go, they're automatically saved in the database.

1.3 List Projects

Clinical

165.227.162.43/clinical/index.php

Clinical Home Add Project Add Room List Projects List Rooms



PROJECTS LIST

Project Name	Actions
District Hospital and Health Centre	View - Delete - Information

This phase Projects List give three options to the user first to view the saved data as follows:

Clinical	Home	Add Project	Add Room	List Projects	List Rooms
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PROJECT DATA

Project Number	Project Name	Owner	Contractor	Date	Address	Actions
410	District Hospital and Health Centre	Asmaa Mourad	Laila Abbas	2018-04-10	741 Centre Street, Burns Lake	Delete

PROJECT'S ROOMS

ID	Actions
101 corridor	View - Delete
101A Lobby	View - Delete
106A Medical Records	View - Delete
115 Nurse Practitioner Office	View - Delete
116A Clean Linen	View - Delete
117 Physician/Staff Change	View - Delete
287 Lockers	View - Delete

Second if you want to delete the whole project database and third for the retrieval system. It gives the components numbers needed in the whole project to start asking for components prices and determine the whole cost of building. It gives also charts to make it more visible to the user each type of the components' percentage in the hospital and if you want to omit one of them from the chart and get the others relative percentage just click on it and it appears as shown:

RETRIEVAL SYSTEM

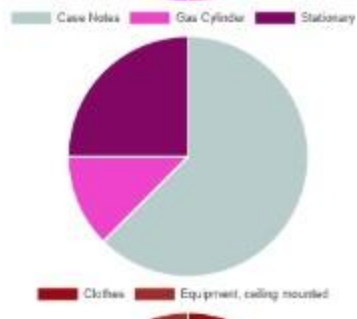
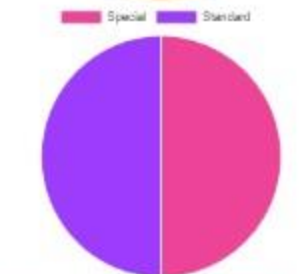
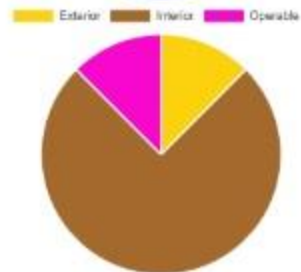
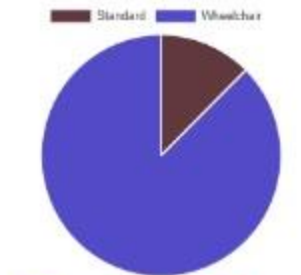
DoorWidth	Count
Standard	1
Wheelchair	7

Windows	Count
Exterior	1
Interior	6
Operable	1

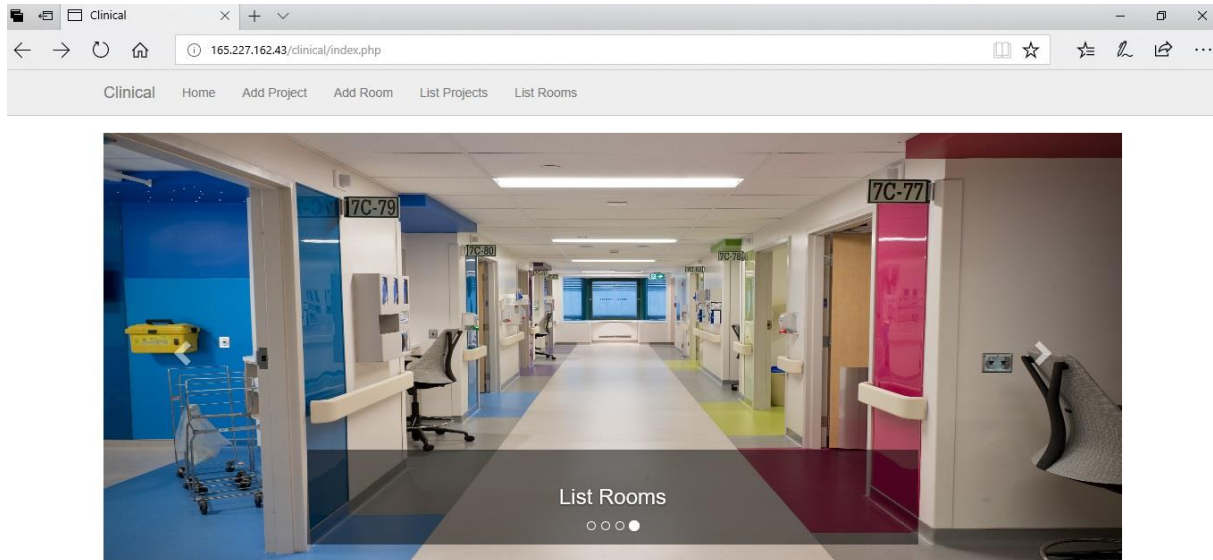
CeilingHeight	Count
Special	4
Standard	4

Racks	Count
Case Notes	5
Gas Cylinder	1
Stationary	2

Hooks	Count
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1.4 List Rooms

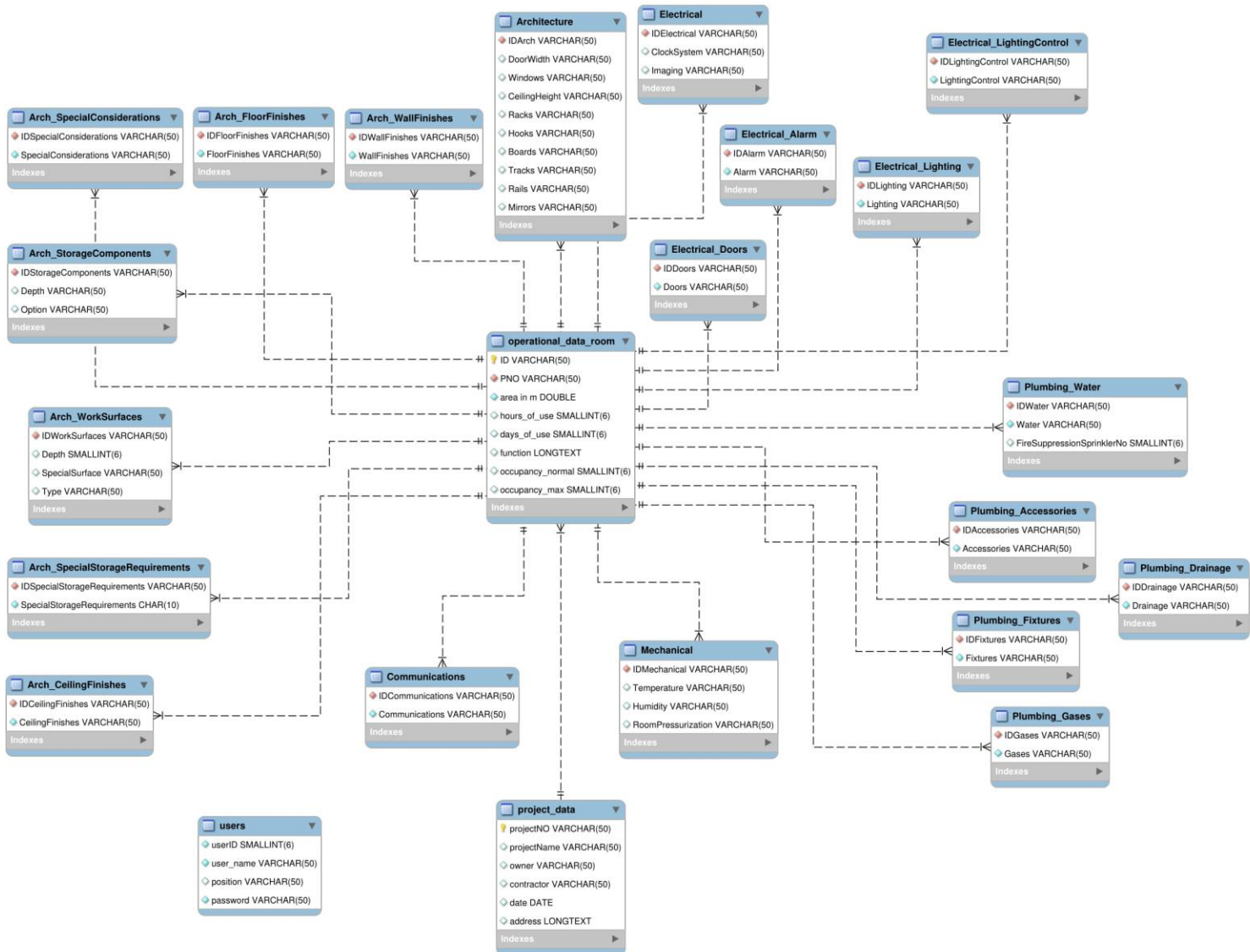


ROOMS LIST

ID	Project Name	Actions
101 corridor	District Hospital and Health Centre	View - Delete
101A Lobby	District Hospital and Health Centre	View - Delete
106A Medical Records	District Hospital and Health Centre	View - Delete
115 Nurse Practitioner Office	District Hospital and Health Centre	View - Delete
116A Clean Linen	District Hospital and Health Centre	View - Delete
117 Physician/Staff Change	District Hospital and Health Centre	View - Delete
119A Waiting	District Hospital and Health Centre	View - Delete
	District Hospital and Health Centre	

The same as the previous one but for each room separately has view and delete options.

2.Database



Here is the room database showing relations between tables where data saved. The main project table (project_data) contains the project features and related to room table (operational_data_room) which also has room features and in turn related to all tables having room specifications.

3.Link for Interface Program

<http://165.227.162.43/clinical/index.php>

In the end, Software is a wonderful tool that's used to make data more organized and easier to deal with. This program facilitates communication of data between different persons working on hospital construction, makes it easier to specify certain requirements without much loss in the details needed which can be forgotten by the designer and give more specific data to be easily understood by the other people reading this data.