
Computer Science 148 – Database Design

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Assignment: Final Project

THE CNB SWAPPER

Version <1.0>

Title of project	Version <1.0>
The CNB Swapper	Date : 10/30/2018

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Time Log			
Estimated time to complete assignment =>			70 Hours
Date	Time Spent (in hours)	Description	Author
10/31	1	Created git repo. Discussed project topic and group roles.	Christopher T. Sutor, Nana Nimako, Benjamin Sylvester
11/03	0.5	Creating time log and adding all members to it. Remind group of our email update due Monday. Work on email update	Benjamin Sylvester
11/08	1.5	Digressed our project idea to be more competitive for the CS Fair. Entered the CS Fair. Created a draft walkthrough of our website. Determined the functionalities we wanted. Created a draft of the database structure.	Christopher T. Sutor, Nana Nimako, Benjamin Sylvester
11/12	1	Created initial files and created the initial commit. Also created draft for look of home page.	Christopher Sutor
11/13	1.5	Added the final slider, nav and some css for the index page	Nana Nimako
11/19	3	Finished HTML for form. Working to create tables in PHP myAdmin to select and insert into. Created the database, tables, and ERD diagram. Started working on saving form data to database	Benjamin Sylvester Christopher Sutor
11/29	3	Continued work on the database. Populated tblHalls with all the UVM residential halls. Created the listbox of halls. Ammended the tables. Added form fields for comments, and I am working on image uploads.	Christopher Sutor
11/29	2	Created all the campus pages	Nana Nimako
11/30	2	finished uploading images process, finished htaccess creation/application/reorganization, finished the tables as of the current	Christopher Sutor
11/30	1	Group Meeting. Combined our code. Got an updated version on everybody's machine. CSS.	Christohper T. Sutor, Nana Nimako, Benjamin Sylvester
12/02	2	Edited the css for the pages and all the pictures that was taken fot the site	Nana Nimako

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12/03	1	Created PHP for the listing/market page and sent it to the team	Christopher Sutor
12/03	1.5	Adding some new content and made a new page for the project	Nana Nimako
12/03	2.5	Fixed images for each campus page and created hover descriptions for each hall. Created submission messages and links to explore pages. Fixed link to home page	Ben Sylvester
12/04	6	A lot of CSS, and got pages and tables working for in-class presentation.	Christopher T. Sutor, Nana Nimako
12/06	2	Fixed all HTML errors and css	Nana Nimako
	30.5	<=Total Time Spent	

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Introduction

Purpose

The purpose of this document is to describe the requirement specification for the web site "The CNB SWAPPER".

The intended audience for this document is UVM undergraduate Students

First it is the contract between you and the client. Second it is for the developer of the site. Two primary goals are:

- 1. Client gets a very good understanding of what you will be delivering.*
- 2. Developer has a very good understanding of what they are going to create.*

Definitions, acronyms, and abbreviations

Sample for the client:

ER Diagram – a diagram to represent the data you want to save with your system

W3 Validation – refers to both Html and CSS validation tool provided by the W3c.org. the html validator is located at:

<http://validator.w3.org/>

with the CSS validator located at:

<http://jigsaw.w3.org/css-validator/>

Overall Description

The CNB Swapper is web application designed for UVM underclassmen to swap dorms with another student on campus. The student fills out our form application, and their application is sent to our explore page. From here, users can view all swap postings. If they see a dorm they would be interested in swapping into, they can select that dorm and request a swap. For a match to be made, the two users have to request each other's posting. When that occurs, an email message is sent to both users notifying them that a match has been made.

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Story Board

Tables Design Draft

tbl Students				tbl Request		
Name	Email	Dorm	prnk	StudentID	Other StudentID	prnk
Chris	cs@um	1	1	(Chris) 1	(Nana) 2	1
Nana	nanan			(Nana) 2	(Chris) 1	2
Nana	nanan	2	2			

tbl Dorm	
dorm	prnk
l/l	1
Mercury	2

* each student should have stored what dorm they live in

Matching:

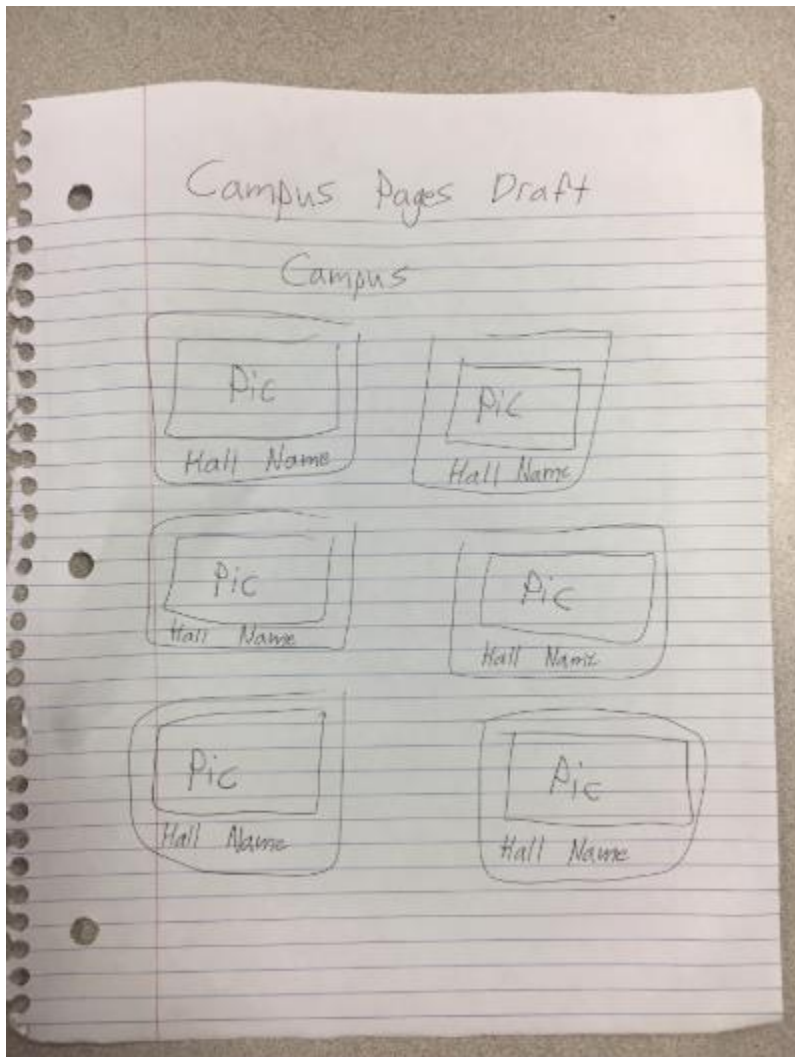
```

if (StudentID == Chris && OtherStudentID == Nana) {
    if (StudentID == Nana & OtherStudentID == Chris) {
        // A match is made
    }
}

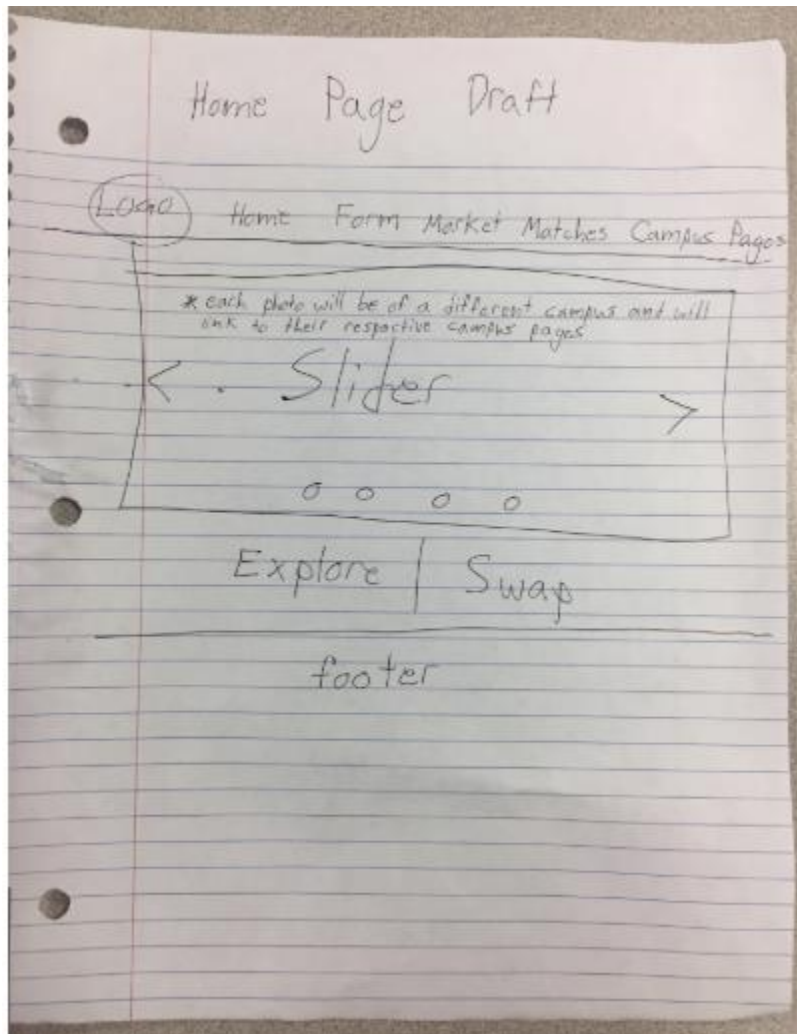
```

we need a query to do this

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Form Draft

Swap!

First Name

Last Name

Email

Hall

L/L	<input type="checkbox"/>
McAuley	
Mercy	

Room Number

Dorm Style

Traditional	<input type="checkbox"/>
Suite	

Roommates ☐ To IV

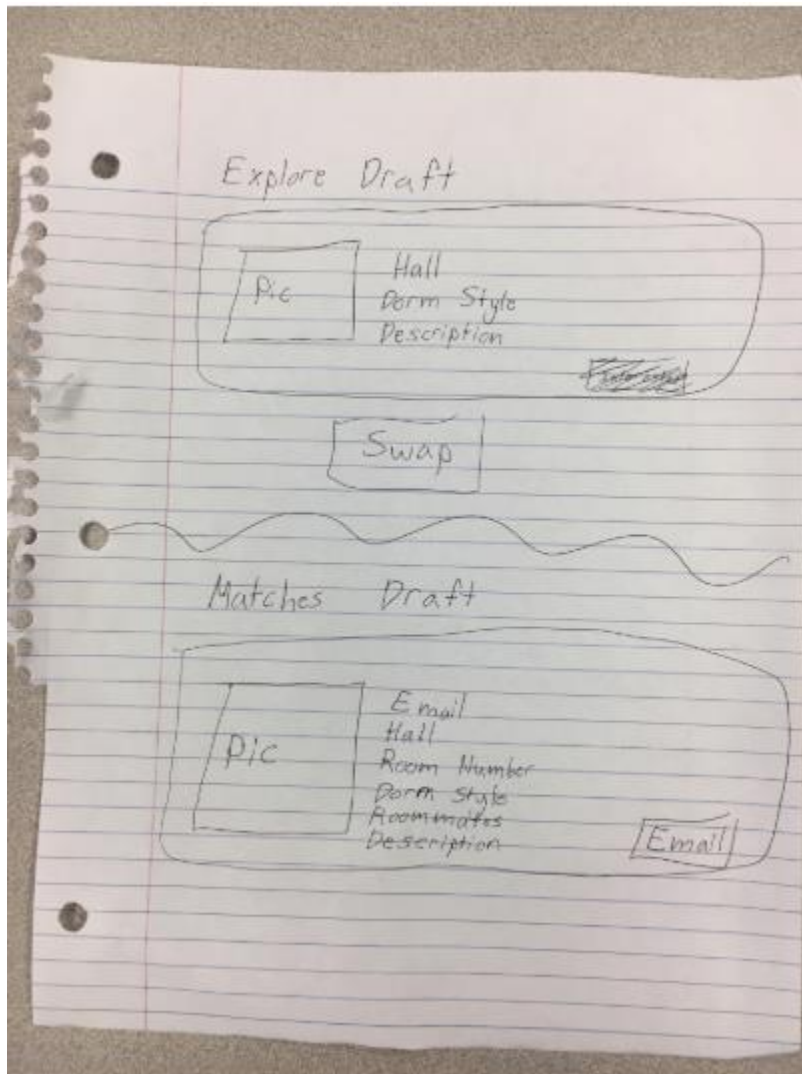
Class Standing ☐ Freshman ☐ Sophomore
☐ Junior ☐ Senior

Comments:

Upload Pic:

Please select your Reason: ☒ Roommate ☐ Location
 (this will be kept private) ☒ Food ☐ Other

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Data Dictionary

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Print view - phpMyAdmin 4.8.3

tblDorms

Column	Type	Null	Default	Links to	Comments
fnkStudentId	int(2)	No		tblStudentInfo -> pmkStudentId	
fldRoomNumber	varchar(4)	No			
fldRoommates	int(2)	No			
fldDormStyle	varchar(11)	No			
fnkHallId	int(2)	No		tblHalls -> pmkHallId	
fldDescription	varchar(250)	No			
fnkImageId	int(2)	No		tblUserImages -> pmkImageId	
pmkUserDormId (Primary)	int(2)	No			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	pmkUserDormId	1	A	No	
fnkStudentId	BTREE	No	No	fnkStudentId	1	A	No	
fnkHallId	BTREE	No	No	fnkHallId	1	A	No	
fnkImagePath	BTREE	No	No	fnkImageId	1	A	No	

tblHalls

Column	Type	Null	Default	Links to	Comments
fldHall	varchar(25)	No			
pmkHallId (Primary)	int(2)	No			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	pmkHallId	33	A	No	

tblRequest

Column	Type	Null	Default	Links to	Comments
fnkStudentID	int(3)	No		tblStudentInfo -> pmkStudentId	
fnkOtherStudentId	int(3)	No		tblStudentInfo -> pmkStudentId	
fnkDormIdRequested	int(2)	No		tblDorms -> pmkUserDormId	
pmkRequestId (Primary)	int(2)	No			

Indexes

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Print view - phpMyAdmin 4.8.3

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	pmkRequestId	0	A	No	
fknStudentID	BTREE	No	No	fknStudentID	0	A	No	
				fknOtherStudentId	0	A	No	
fknHallRequested	BTREE	No	No	fknDormIdRequested	0	A	No	
fknOtherStudentId	BTREE	No	No	fknOtherStudentId	0	A	No	

tblStudentInfo

Column	Type	Null	Default	Links to	Comments
fldNetIdUsername	varchar(20)	No			
fldFirstName	varchar(20)	No			
fldLastName	varchar(20)	No			
fldEmail	varchar(20)	No			
fldClassStanding	varchar(9)	No			
fknDormId	int(3)	No			
pmkStudentId (Primary)	int(3)	No			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	pmkStudentId	2	A	No	
fknDormId	BTREE	No	No	fknDormId	2	A	No	

tblUserImages

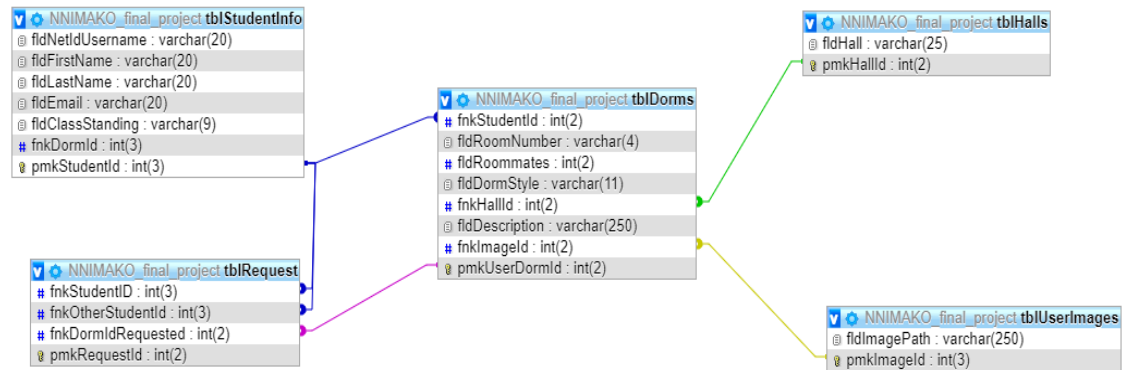
Column	Type	Null	Default	Links to	Comments
fldImagePath	varchar(250)	No			
pmkImageId (Primary)	int(3)	No			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	pmkImageId	1	A	No	

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ER- Diagram



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Schema

Paste your schema here. The final version is easy to get by exporting to the screen in phpMyadmin

```
-- phpMyAdmin SQL Dump
-- version 4.8.3
-- https://www.phpmyadmin.net/
--
-- Host: webdb.uvm.edu
-- Generation Time: Dec 11, 2018 at 06:06 PM
-- Server version: 5.6.39-83.1-log
-- PHP Version: 7.2.12

SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
SET AUTOCOMMIT = 0;
START TRANSACTION;
SET time_zone = "+00:00";

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;

--
-- Database: `BSYLVEST_final_project`
--

--
-- -----
--
-- Table structure for table `tblDorms`
--

CREATE TABLE `tblDorms` (
  `fnkStudentId` int(2) NOT NULL,
  `fldRoomNumber` varchar(4) NOT NULL,
  `fldRoommates` int(2) NOT NULL,
  `fldDormStyle` varchar(11) NOT NULL,
  `fnkHallId` int(2) NOT NULL,
  `fldDescription` varchar(250) NOT NULL,
  `fnkImageId` int(2) NOT NULL,
  `pmkUserDormId` int(2) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

--
-- Dumping data for table `tblDorms`
--
```

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```

INSERT INTO `tblDorms` (`fnkStudentId`, `fldRoomNumber`,
`fldRoommates`, `fldDormStyle`, `fnkHallId`, `fldDescription`,
`fnkImageId`, `pmkUserDormId`) VALUES
(28, '3', 2, 'Traditional', 23, 'fun dorm', 7, 23),
(29, '420', 1, 'Traditional', 12, 'int', 8, 24);

```

```

-- -----

```

```

--
-- Table structure for table `tblHalls`
--

```

```

CREATE TABLE `tblHalls` (
  `fldHall` varchar(25) NOT NULL,
  `pmkHallId` int(2) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

```

```

--
-- Dumping data for table `tblHalls`
--

```

```

INSERT INTO `tblHalls` (`fldHall`, `pmkHallId`) VALUES
('CCRH', 1),
('Christie', 2),
('Coolidge', 3),
('Patterson', 4),
('Redstone', 5),
('Slade', 6),
('Redstone', 7),
('Slade', 8),
('Wright', 9),
('Converse', 10),
('Cottages', 11),
('Hunt', 12),
('McAuley', 13),
('McCann', 14),
('Mercy', 15),
('Ready', 16),
('Richardson', 17),
('Sichel', 18),
('Harris', 19),
('Millis', 20),
('Jeanne Mance', 21),
('L/L', 22),
('Austin', 23),
('Marsh', 24),
('Tupper', 25),
('Hamilton', 26),
('Mason', 27),
('Simpson', 28),
('U. Heights North', 29),

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```

('U. Heights South', 30),
('Davis', 31),
('Wilks', 32),
('Wing', 33);

```

```

-- -----

```

```

--
-- Table structure for table `tblRequest`
--

```

```

CREATE TABLE `tblRequest` (
  `fnkStudentID` int(3) NOT NULL,
  `fnkOtherStudentId` int(3) NOT NULL,
  `fnkDormIdRequested` int(2) NOT NULL,
  `pmkRequestId` int(2) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

```

```

--
-- Dumping data for table `tblRequest`
--

```

```

INSERT INTO `tblRequest` (`fnkStudentID`, `fnkOtherStudentId`,
`fnkDormIdRequested`, `pmkRequestId`) VALUES
(28, 28, 23, 10),
(28, 28, 23, 11),
(28, 28, 23, 12),
(29, 28, 23, 13),
(28, 29, 24, 14);

```

```

-- -----

```

```

--
-- Table structure for table `tblStudentInfo`
--

```

```

CREATE TABLE `tblStudentInfo` (
  `fldNetIdUsername` varchar(20) NOT NULL,
  `fldFirstName` varchar(20) NOT NULL,
  `fldLastName` varchar(20) NOT NULL,
  `fldEmail` varchar(20) NOT NULL,
  `fldClassStanding` varchar(9) NOT NULL,
  `fnkDormId` int(3) NOT NULL,
  `pmkStudentId` int(3) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

```

```

--
-- Dumping data for table `tblStudentInfo`
--

```


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```

INSERT INTO `tblStudentInfo` (`fldNetIdUsername`, `fldFirstName`,
`fldLastName`, `fldEmail`, `fldClassStanding`, `fnkDormId`,
`pmkStudentId`) VALUES
('placeholder', 'DoNotDelete', 'DoNotDelete', 'placeholder@uvm.edu',
'Freshman', 0, 0),
('bsylvest', 'Ben', 'Sylvester', 'benjamin.sylvester@u',
'Sophomore', 23, 28),
('cswingle', 'Christopher', 'Swingle', 'cswingle@uvm.edu',
'Sophomore', 24, 29);

```

```

-- -----

```

```

--
-- Table structure for table `tblUserImages`
--

```

```

CREATE TABLE `tblUserImages` (
  `fldImagePath` varchar(250) NOT NULL,
  `pmkImageId` int(3) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

```

```

--
-- Dumping data for table `tblUserImages`
--

```

```

INSERT INTO `tblUserImages` (`fldImagePath`, `pmkImageId`) VALUES
('../images/user-dorm-images/mercyPosterPic.jpeg', 7),
('../images/user-dorm-images/Screenshot (2).png', 8);

```

```

--
-- Indexes for dumped tables
--

```

```

--
-- Indexes for table `tblDorms`
--

```

```

ALTER TABLE `tblDorms`
  ADD PRIMARY KEY (`pmkUserDormId`),
  ADD KEY `fnkStudentId` (`fnkStudentId`),
  ADD KEY `fnkHallId` (`fnkHallId`),
  ADD KEY `fnkImagePath` (`fnkImageId`);

```

```

--
-- Indexes for table `tblHalls`
--

```

```

ALTER TABLE `tblHalls`
  ADD PRIMARY KEY (`pmkHallId`);

```

```

--
-- Indexes for table `tblRequest`
--

```

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```
ALTER TABLE `tblRequest`
  ADD PRIMARY KEY (`pmkRequestId`),
  ADD KEY `fnkStudentID` (`fnkStudentID`,`fnkOtherStudentID`),
  ADD KEY `fnkHallRequested` (`fnkDormIdRequested`),
  ADD KEY `fnkOtherStudentId` (`fnkOtherStudentId`);
```

```
--
-- Indexes for table `tblStudentInfo`
--
```

```
ALTER TABLE `tblStudentInfo`
  ADD PRIMARY KEY (`pmkStudentId`),
  ADD KEY `fnkDormId` (`fnkDormId`);
```

```
--
-- Indexes for table `tblUserImages`
--
```

```
ALTER TABLE `tblUserImages`
  ADD PRIMARY KEY (`pmkImageId`);
```

```
--
-- AUTO_INCREMENT for dumped tables
--
```

```
--
-- AUTO_INCREMENT for table `tblDorms`
--
```

```
ALTER TABLE `tblDorms`
  MODIFY `pmkUserDormId` int(2) NOT NULL AUTO_INCREMENT,
  AUTO_INCREMENT=25;
```

```
--
-- AUTO_INCREMENT for table `tblHalls`
--
```

```
ALTER TABLE `tblHalls`
  MODIFY `pmkHallId` int(2) NOT NULL AUTO_INCREMENT,
  AUTO_INCREMENT=34;
```

```
--
-- AUTO_INCREMENT for table `tblRequest`
--
```

```
ALTER TABLE `tblRequest`
  MODIFY `pmkRequestId` int(2) NOT NULL AUTO_INCREMENT,
  AUTO_INCREMENT=15;
```

```
--
-- AUTO_INCREMENT for table `tblStudentInfo`
--
```

```
ALTER TABLE `tblStudentInfo`
  MODIFY `pmkStudentId` int(3) NOT NULL AUTO_INCREMENT,
  AUTO_INCREMENT=30;
```

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```
--
-- AUTO_INCREMENT for table `tblUserImages`
--
ALTER TABLE `tblUserImages`
  MODIFY `pmkImageId` int(3) NOT NULL AUTO_INCREMENT,
  AUTO_INCREMENT=9;

--
-- Constraints for dumped tables
--

--
-- Constraints for table `tblDorms`
--
ALTER TABLE `tblDorms`
  ADD CONSTRAINT `tblDorms_ibfk_1` FOREIGN KEY (`fnkHallId`)
REFERENCES `tblHalls` (`pmkHallId`),
  ADD CONSTRAINT `tblDorms_ibfk_3` FOREIGN KEY (`fnkStudentId`)
REFERENCES `tblStudentInfo` (`pmkStudentId`),
  ADD CONSTRAINT `tblDorms_ibfk_4` FOREIGN KEY (`fnkImageId`)
REFERENCES `tblUserImages` (`pmkImageId`);

--
-- Constraints for table `tblRequest`
--
ALTER TABLE `tblRequest`
  ADD CONSTRAINT `tblRequest_ibfk_1` FOREIGN KEY (`fnkStudentID`)
REFERENCES `tblStudentInfo` (`pmkStudentId`) ON DELETE CASCADE ON
UPDATE CASCADE,
  ADD CONSTRAINT `tblRequest_ibfk_2` FOREIGN KEY
(`fnkOtherStudentId`) REFERENCES `tblStudentInfo` (`pmkStudentId`)
ON DELETE CASCADE ON UPDATE CASCADE,
  ADD CONSTRAINT `tblRequest_ibfk_3` FOREIGN KEY
(`fnkDormIdRequested`) REFERENCES `tblDorms` (`pmkUserDormId`) ON
DELETE CASCADE ON UPDATE CASCADE;
COMMIT;

/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```

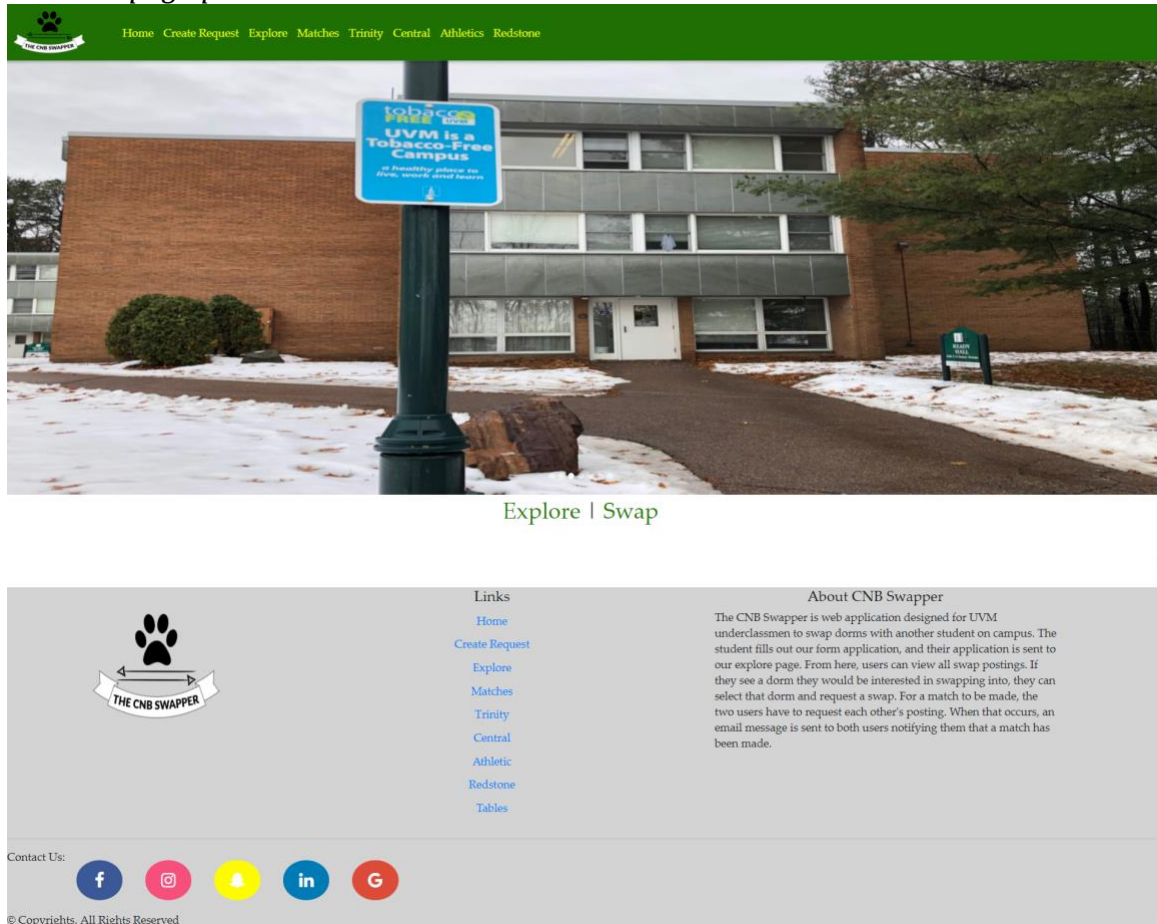
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Specific requirements

1. *Title for main page:* CNB Swapper
2. *Meta Description:* A web application that allows undergraduates from the university of Vermont get the opportunity to upload or list their dorm on a market for swap or change
3. *Meta Character set:* UTF - 8
4. *Logo:*




5. *Main page photo:*




6. *Campus pages:*

This was repeated for the other campuses (Central, Athletic, and Trinity)


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[Home](#)
[Create Request](#)
[Explore](#)
[Matches](#)
[Trinity](#)
[Central](#)
[Athletics](#)
[Redstone](#)


Redstone Campus






Coolidge Hall




Davis Hall



Mason Hall

7. Create a Request Page:


[Home](#)
[Create Request](#)
[Explore](#)
[Matches](#)
[Trinity](#)
[Central](#)
[Athletics](#)
[Redstone](#)
[Tables](#)

Apply to Swap Today!

Your information will be sent to our swapping database where we will try to pair you with a fellow swapper.

Swap Information

First Name

Last Name

Email

Hall

Room Number

Dorm Style

Roommates

Class Standing


☐ Freshman
☐ Sophomore
☐ Junior
☐ Senior

Comments:

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When there's a match:


[Home](#)
[Create Request](#)
[Explore](#)
[Matches](#)
[Trinity](#)
[Central](#)
[Athletics](#)
[Redstone](#)
[Tables](#)



Match

Email: ben.sylvester@uvm.edu
Hall: Austin
Room Number: 3
Dorm Style: Traditional
Roommates: 1
Description: fun dorm

Ready to take the next step?