



IT360 Project Report

Team 1: Weekend Tracker

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Innovative Feature: Web-based Weekend Tracker

Extra Credit: Poster

Unmet Requirements: None

Table of Contents

i.	Introduction	2
ii.	User Manual	3-10
	◦ Default Usernames/Passwords	
iii.	Technical Report	11-13
iv.	Workload Distribution and Files	14-15
v.	ER Diagram	16
vi.	createTables.sql	17-21

Introduction

Tracking midshipmen weekends and submitting entries for each company's weekend list in the Brigade is currently done through Google Sheets or Google Forms. This current process offers a poor user interface and, in most cases, a lack of privacy for any individual midshipman's plans. Thus, we have built a website designed to track weekends and submit weekend plans to the chain of command with a simple and intuitive interface. This will allow midshipmen to more easily see how many weekends

they have left, as well as submit their weekend plans for approval. The website also allows the chain of command to track where midshipmen are going, see if they are using incentives, and approve the weekend list in a timely manner. Additionally, this site adds privacy to midshipmen weekend plans, as the current state of the weekend list shows data to an entire company.

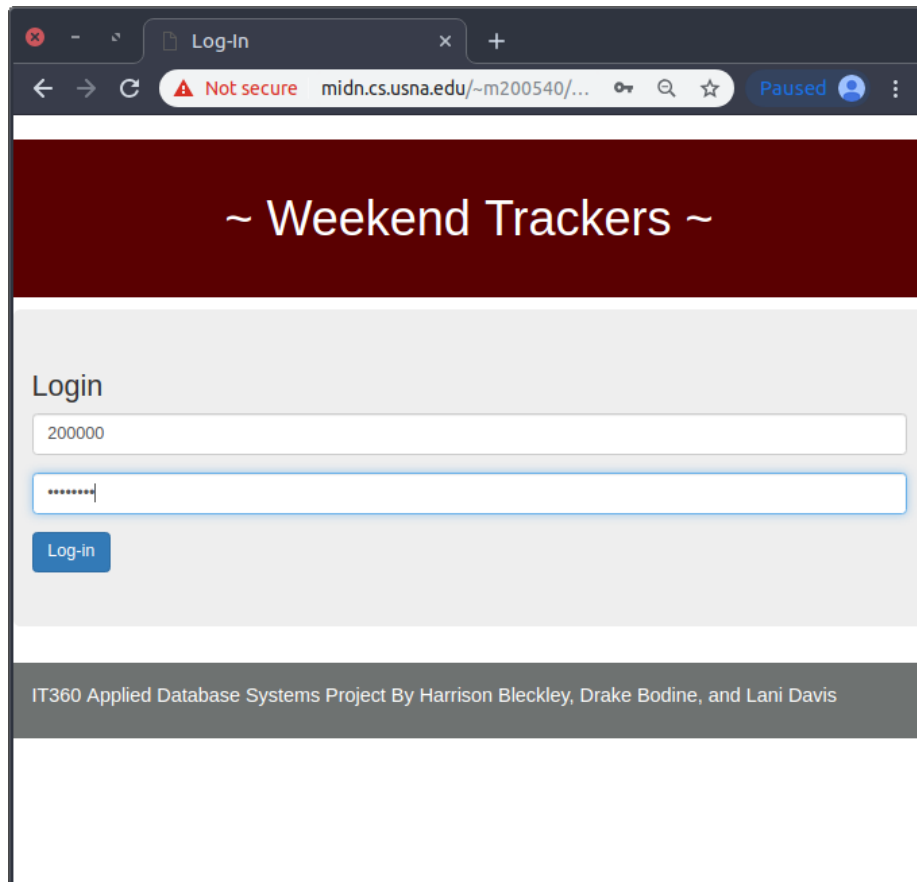


User Manual

Purpose:

This user manual serves as a guide for the general use-case of a midshipman or Company Officer (administrator) for this weekend tracker website. While the order of the following italicized sections would follow a typical use of the system, users can access any of the following functionalities after first logging in.

Logging Into the System:

A screenshot of a web browser window showing the login page for 'Weekend Trackers'. The browser's address bar shows the URL 'midn.cs.usna.edu/~m200540/...' and a 'Not secure' warning. The page has a dark red header with the text '~ Weekend Trackers ~'. Below the header is a light gray login form with the title 'Login'. It contains two input fields: the first has the text '200000' and the second has masked characters '*****'. A blue 'Log-in' button is positioned below the password field. At the bottom of the page, a dark gray footer contains the text 'IT360 Applied Database Systems Project By Harrison Bleckley, Drake Bodine, and Lani Davis'.

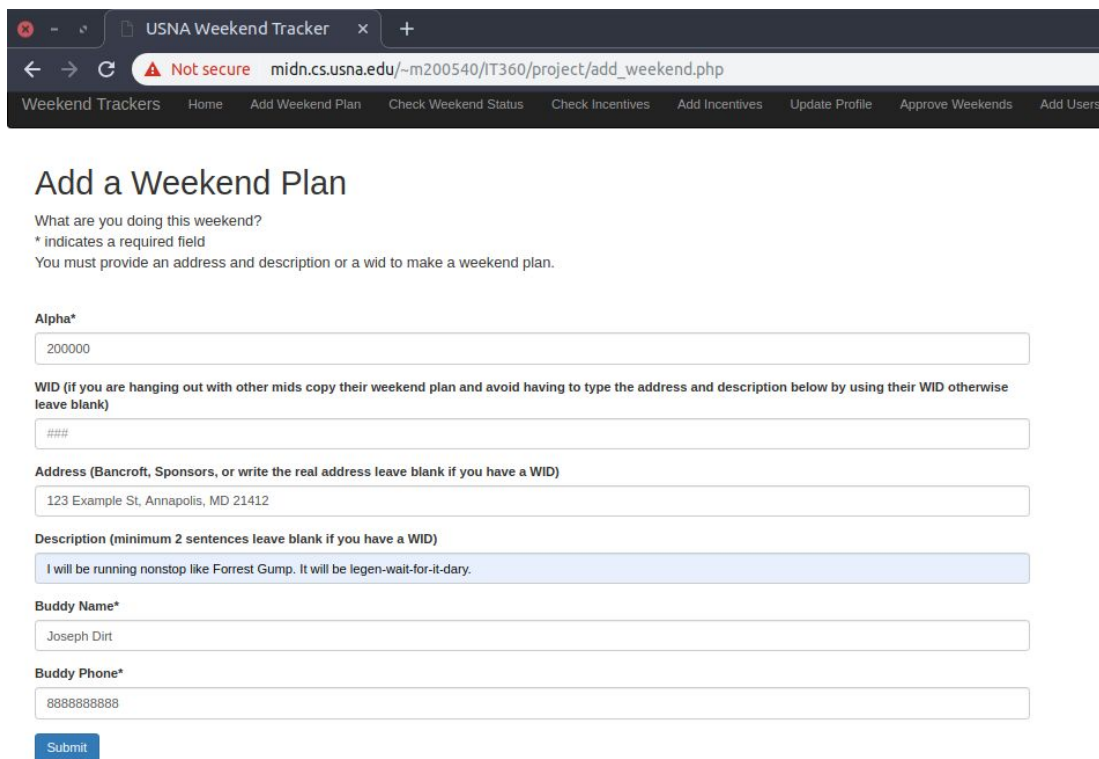
Default Username/Password Combinations:

Username (Alpha)	Password	Administrator?
200000	BEATARMY	Yes
200540	db	No

Table 1: Default Log-In Credentials

All users must first log into the system before gaining access to the functionalities provided below. The user's log-in credentials consist of his/her alpha and password. Company Officers (administrators) will be assigned special alpha codes for logging on. *Table 1* provides default log-in credentials for an administrator (200000) and a default user (200540).

Submitting a Weekend Plan:



The screenshot shows a web browser window titled "USNA Weekend Tracker". The address bar shows the URL "midn.cs.usna.edu/~m200540/IT360/project/add_weekend.php". The navigation bar includes links: "Weekend Trackers", "Home", "Add Weekend Plan", "Check Weekend Status", "Check Incentives", "Add Incentives", "Update Profile", "Approve Weekends", and "Add Users".

Add a Weekend Plan

What are you doing this weekend?
 * indicates a required field
 You must provide an address and description or a wid to make a weekend plan.

Alpha*

WID (if you are hanging out with other mids copy their weekend plan and avoid having to type the address and description below by using their WID otherwise leave blank)

Address (Bancroft, Sponsors, or write the real address leave blank if you have a WID)

Description (minimum 2 sentences leave blank if you have a WID)

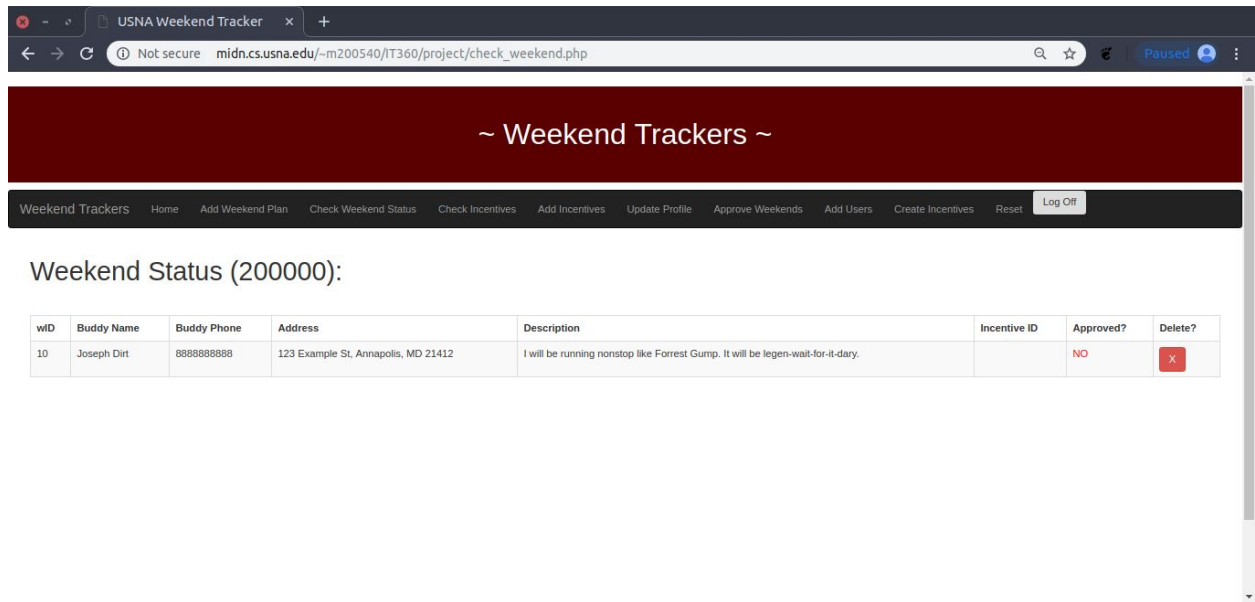
Buddy Name*

Buddy Phone*

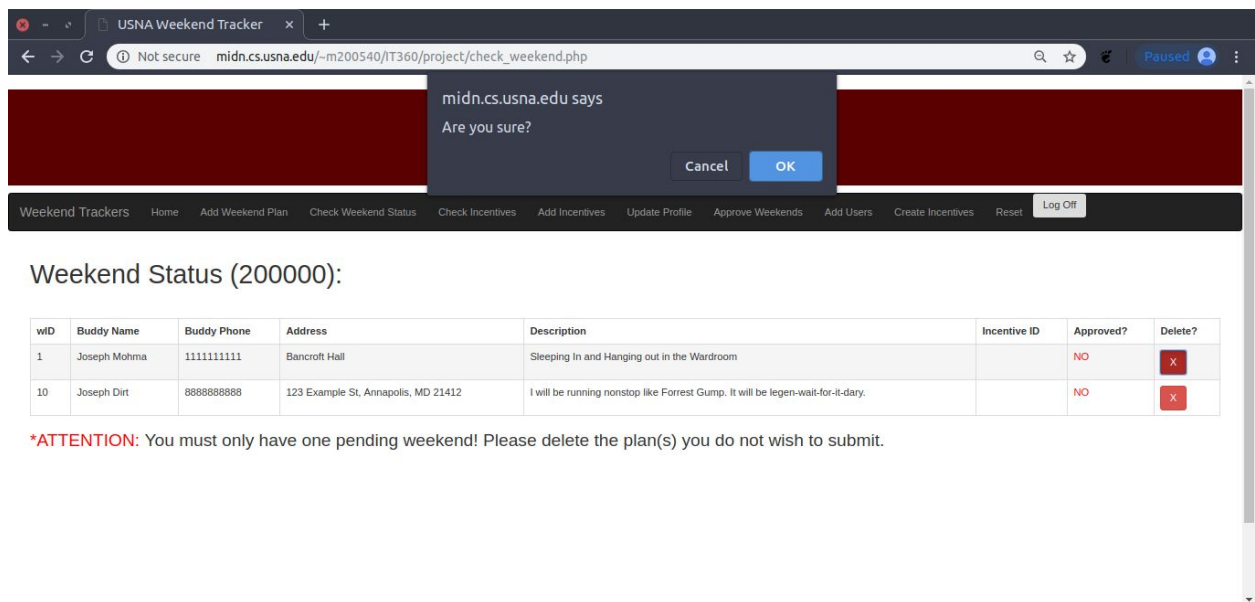
In order to submit a weekend plan, the user must fill out the fields provided in the form (after clicking 'Add Weekend Plan' in the navigation bar) shown above. If a buddy has already submitted a weekend plan that the users will have in common, the user can enter the Weekend ID (WID) provided to his/her buddy upon submission of the form. If a WID is provided, the user should leave the address and description blank. If no WID is provided, a user must provide an address and description. The address field can be filled with "Sponsors" if the user is going to their approved sponsor address registered with the sponsor program and in their user profile. Regardless, a buddy's name and phone number must be entered into the form.

Additionally, a user can submit a weekend plan for another friend for ease of use. All they need to do is provide the alpha of the friend and follow the same instructions as above.

Checking Your Weekend Plan Status:



After clicking on ‘Check Weekend Status’ in the navigation bar, a user can check the current status of his/her weekend plan. The table will include all the pertinent information to his/her submitted weekend plans and whether or not the user’s final plan has been approved. If the user’s information was inputted incorrectly, he/she can click on the corresponding red ‘X’ to delete that plan.



However, only one plan can be submitted for final approval at a time. If the user has more than one submitted plan (e.g. a friend entered a plan for another midshipmen without knowing they had already submitted one), the user must delete unwanted plans one-by-one.

Dealing With Incentives:

Sometimes midshipmen are provided weekend incentives for a variety of reasons (such as attending a sporting event, performing well academically, etc). If a midshipman wants to use an incentive on a certain weekend, they can associate an existing incentive with his/her submitted weekend plan.

The screenshot shows a web browser window with the title 'USNA Weekend Tracker'. The address bar shows 'midn.cs.usna.edu/~m20054...' with a 'Not secure' warning. The navigation bar contains links: Home, Add Weekend Plan, Check Weekend Status, Check Incentives, Add Incentives, Update Profile, Approve Weekends, Add Users, Create Incentives, and Reset. The main content area is titled 'Create an Incentive!' and includes instructions: 'Create an incentive with the first form or award a midshipmen a incentive from the list of current incentives available with the second form!' and '*indicates required field'. Below this is the 'Add an incentive' form with fields for 'Incentive Name' (containing 'Example Incentive'), 'Reward' (containing 'Ex'), and a dropdown for 'If applicable, how many weekends does this incentive give a midshipman?' (set to '1'). A 'Submit' button is at the bottom.

USNA Weekend Tracker

Not secure midn.cs.usna.edu/~m20054...

Home Add Weekend Plan Check Weekend Status Check Incentives Add Incentives

Update Profile Approve Weekends Add Users Create Incentives Reset

Create an Incentive!

Create an incentive with the first form or award a midshipmen a incentive from the list of current incentives available with the second form!

*indicates required field

Add an incentive

Incentive Name

Example Incentive

Reward

Ex

If applicable, how many weekends does this incentive give a midshipman?
(Choose 0 if not applicable)

1

Submit

To create an incentive the user should first click on 'Create Incentives' in the navigation bar. Next, the user will fill out the fields shown above and click 'Submit'.

USNA Weekend Tracker

Not secure midn.cs.usna.edu/~m200540/IT360/project/create_incentive.php

Reward

What does this incentive give someone?

If applicable, how many weekends does this incentive give a midshipman? (Choose 0 if not applicable)

0

Submit

Give someone an incentive

Alpha

200000

Incentive_ID

8

Submit

Current Incentives

IncentiveID	Name	Reward	How many weekends does it add?
1	Army-Navy Football Win	1 Beat Army Weekend	1
2	Midshipmen of the Month-1/C	An extra upperclass weekend and extended EOL	1
7	Quarantine MVP	1 Beat-Quarantine Weekend	1
8	Example Incentive	Example Weekend	2

After hitting ‘Submit,’ the user can see the incentive they just created in the table at the bottom of the webpage. Next, the user can give the incentive to a certain midshipman by filling out their respective alpha and the corresponding Incentive ID, and clicking ‘Submit’ afterwards.

USNA Weekend Tracker

Not secure midn.cs.usna.edu/~m200540/IT360/project/check_incentive.php

~ Weekend Trackers ~

Weekend Trackers Home Add Weekend Plan Check Weekend Status Check Incentives Add Incentives Update Profile Approve Weekends Add Users Create Incentives Reset Log Off

Check your incentives!

You are currently logged in as alpha: 200000
Check what incentives you have!

Your Current Incentives

IncentiveID	Name of the Incentive	Reward Description
2	Midshipmen of the Month-1/C	An extra upperclass weekend and extended EOL
8	Example Incentive	Example Weekend

Any midshipman can view his/her current incentives by clicking on ‘Check Incentives’ in the navigation bar. The user should take note of the Incentive ID if he/she plans on adding to his/her weekend plan.

The screenshot shows a web browser window with the URL `midn.cs.usna.edu/~m200540/IT360/project/add_incentive.php`. The page has a dark red header with the text `~ Weekend Trackers ~`. Below the header is a navigation bar with links: `Weekend Trackers`, `Home`, `Add Weekend Plan`, `Check Weekend Status`, `Check Incentives`, `Add Incentives`, `Update Profile`, `Approve Weekends`, `Add Users`, `Create Incentives`, `Reset`, and `Log Off`. The main content area is titled `Add an Incentive to your Weekend` and includes a sub-header `Lucky mid you have an incentive to use. Add it to your weekend plan to redeem it!` and a note `* Indicates a required field`. The form contains two text input fields: `WID*` with the value `10` and `Incentive ID*` with the value `8`. A blue `Submit` button is located below the fields. A message below the button reads `Please fill out the required fields in the form above to add an incentive.` At the bottom of the page, a footer states `IT360 Applied Database Systems Project By Harrison Bleckley, Drake Bodine, and Lari Davis`.

In order to associate a specific incentive with his/her weekend plan, a midshipman must visit the ‘Add Incentives’ page. From there, the midshipmen will enter the WID and Incentive ID that they have noted previously. The incentive will now show up in the ‘Check Weekend Status’ table!

Updating Your Profile:

The screenshot shows a web browser window with the URL `midn.cs.usna.edu/~m200540/IT360/project/update.php`. The page has a dark red header with the text `~ Weekend Trackers ~`. Below the header is a navigation bar with links: `Weekend Trackers`, `Home`, `Add Weekend Plan`, `Check Weekend Status`, `Check Incentives`, `Add Incentives`, `Update Profile`, `Approve Weekends`, `Add Users`, `Create Incentives`, `Reset`, and `Log Off`. The main content area is titled `Update your information!` and includes a sub-header `Update any of your information you need to in this form! You are currently logged in as alpha: 200000` and a note `*Indicates required field`. The form contains four text input fields: `Password` with the value `*****`, `Company` with the value `9`, `Cell Phone Number` with the value `1234567890`, and `Sponsors` with the value `123 Madeup Dr., Annapolis, MD 21412`. A blue `Submit` button is located below the fields. A message below the button reads `Please submit the information you would like to update.` At the bottom of the page, a footer states `IT360 Applied Database Systems Project By Harrison Bleckley, Drake Bodine, and Lari Davis`.

After clicking on ‘Update Profile’ a user can update his/her password, company, cell phone number, and/or sponsor’s address. All the user needs to do is fill out each of the form fields as shown above and click ‘Submit’!

Approving Weekends (ADMIN ONLY):

The screenshot shows a web browser window with the title 'Approve Weekends'. The address bar shows the URL 'midn.cs.usna.edu/~m200540/IT360/project/approve.php'. The page has a dark red header with the text '~ Weekend Trackers ~'. Below the header is a navigation bar with links: 'Weekend Trackers', 'Home', 'Add Weekend Plan', 'Check Weekend Status', 'Check Incentives', 'Add Incentives', 'Update Profile', 'Approve Weekends', 'Add Users', 'Create Incentives', 'Reset', and a 'Log Off' button. The main content area is titled 'Select Company' and contains a text input field with the value '1' and a 'Submit' button. Below this is a section titled 'Company Members' which contains a table with the following data:

Alpha	Name	Buddy	Buddy Phone	WID	Address	Description	Approved
200000	US NA	Joseph Dirt	8888888888	10	123 Example St, Annapolis, MD 21412	I will be running nonstop like Forrest Gump. It will be legen-wait-for-it-dary.	<input checked="" type="checkbox"/>
200540	Drake Bodine	W. T. Door	1111111111	8	1234 Sesame Street, Towncity, Neverland 12345	I will be running nonstop like Forrest Gump. It will be legen-wait-for-it-dary.	<input checked="" type="checkbox"/>

Below the table is an 'Approve' button.

When the Company Officer is ready to approve/disapprove weekend plans, all they need to do is click on ‘Approve Weekends,’ enter his/her respective Company number, hit submit, check each ‘Approved’ box for the midshipmen they wish to approve, and finalize the approved weekend list by hitting the ‘Approve’ button below the table.

Adding New Users (ADMIN ONLY):

The screenshot shows a web browser window with the title 'USNA Weekend Tracker'. The address bar shows the URL 'midn.cs.usna.edu/~m200540/IT360/project/add_users.php'. The page has a dark red header with the text '~ Weekend Trackers ~'. Below the header is a navigation bar with links: 'Weekend Trackers', 'Home', 'Add Weekend Plan', 'Check Weekend Status', 'Check Incentives', 'Add Incentives', 'Update Profile', 'Approve Weekends', 'Add Users', 'Create Incentives', 'Reset', and a 'Log Off' button. The main content area is titled 'Add User' and contains the following text: 'Add a user. You will need an alpha, first name, last name, company, phone number, password, sponsors address, and the number of weekends left. The company, phone number, password, and sponsors address will be able to adjusted later by the midshipmen once they are added to the system. All fields are required'. Below this text are the following input fields:

- Alpha: 249999
- First Name: Abe
- Last Name: Banks
- Password: *****
- Company: 11
- Cell Number: 1111111111
- Weekend Number: 1
- Sponsors Address: 123 Example Ave., Annapolis, MD 21412

Administrators can add new users to the system by clicking on ‘Add Users’ in the navigation bar, enter the user’s profile information, and click ‘Submit’. All unregistered midshipmen can only gain access to the system by first being added by an administrator.

Technical Report

Purpose:

This Technical Report serves as a description of how the weekend tracker system works from a coding standpoint. While the User Manual provides a guide as to how to interface and use the system in a web browser, this report describes how the system functions from “behind-the-scenes” for interested developers/contributors.

Overview:

The weekend tracker system consists of a web interface, supported by a back-end database for data storage. The web files all use PHP to provide the user with a simple, and easily navigable interface to add, store, and check the status of his/her weekends. The database-related files deal with setting-up, deleting/restoring, and automating the storage of all the information related to weekends and system users. The source code (clone here if needed:

<https://github.com/hbleckley17/IT360.git>) is split into these two directories accordingly: ‘web/’ for all the web-related files and ‘db/’ for the database-related files. The following sections will further explain how the front-end and back-end of this system work.

Database Back-end:

The database (‘it360_weekend_tracker’) utilized for this system is on the midn.cs.usna.edu server and uses MySQL 5.7. The database is built using the createTables.sql file, generateData.sql for testing data, and deleted with the dropTables.sql file. The procedure.sql and triggers.sql files are used to enforce constraints and ensure the tables are updated when midshipmen want to change their plans. The following subsections will explain how each role in our system is implemented into the database schema and .sql files.

For a visual representation of the database, please see the attached [ER Diagram](#).

The User - Every user of the system has a corresponding entry in the ‘midshipmen’ table, including his/her personal information, login credentials, and PHP session data. The ‘Company’ and ‘Cell’ tables associate the user’s alpha with his/her company and phone number, respectively. The ‘weekends_left’ table shows how many weekends any given user has left. The ‘sponsors’ table associates a midshipmen with his/her sponsor family’s address. The ‘auth_session’ table keeps track of all the login information, and valid PHP sessions.

Weekend Plans - A single weekend plan consists of a WID, alpha, buddy’s name, and buddy’s phone. Multiple midshipmen can have the same WID (corresponding to an address and description in the ‘weekendplans’ table) if they have the same agenda for the weekend, but each must have his/her own buddy information. Each of those unique WID and alpha combinations then can be approved or disapproved (in the ‘approved’ table) by the midshipman’s Company Officer (an administrator).

Incentives - An incentive itself can exist without a midshipman having one, so the ‘incentives_available’ table includes all the possible incentives, with an entry containing each’s

ID, name, and corresponding rewards. The 'incentives' table, consisting of an incentive ID and alpha, enumerates which incentives any midshipman has stored. If a midshipman wants to use a stored incentive on a certain weekend, that incentive ID must be associated to his/her weekend plan (tied to his/her alpha and WID). That combination, explaining which weekend plans have incentives applied to them, is stored in the 'weekendextra' table.

Web Front-end:

All the web/ files collectively implement the web interface to the weekend tracker system for our users. Our system uses server-side scripting with PHP, to keep interactions with the database on the server side. Each of the following subsections explains how each major functionality in the system is implemented.

Log-in/Log-out - In order to access the systems main functionalities, the user must log in. The user can either go directly to login.php or he/she will be redirected there if the current PHP Session ID is not valid in the database. These authorization functions are implemented in auth.inc.php and login_functions.inc.php. When the user chooses to log off, he/she will be redirected to logout.php, which will invalidate his/her PHP Session ID in the database and require re-logging in to gain access.

General Webpage Style - We create a Page class defined in page.inc.php in order to handle the general structure, CSS, and bootstrap of our HTML. Every other webpage generates a Page instance and adds inner HTML specific to the functionality of that page. Every page includes a navigation bar that for moving around the site, and a header and footer specific to our site.

Adding Weekends- The add_weekend.php file presents the user with a form that takes in all the necessary information to create a midshipman's weekend plan. Submission of the form validates the information is acceptable, and uses an INSERT INTO statement into our database to store that plan in the 'midweekend' table. A new WID and 'weekendplans' entry will be created if no WID is specified, and that WID will be provided back to the user to share with his/her friends.

Checking Weekend Status - The check_weekend.php file queries the database for all 'midweekend' data and approval status for the logged-in user. The query joins the 'weekendplans,' 'midweekend,' 'approved,' and 'incentives' tables to provide the user with all the information related to the status of his/her weekend plans. If the user decides to delete a plan, the page sends a DELETE FROM statement to all the corresponding tables in the database. This page also shows how many weekends a user has left.

Incentives - Incentives are created in create_incentive.php, taking in data from a form, and an INSERT INTO statement into the 'incentives_available' table. From there the available incentives can be queried from the database and available for review at the bottom of the page. Another form is available for the user to tie a certain incentive to an alpha. These two fields are used to create an entry into the 'incentives' table, which can be queried in check_incentive.php to view all the incentives a certain user has. When a user adds an incentive to a weekend in add_incentive.php, an entry is created into the 'weekendextra' table.

Updating Profile - When a user chooses to update his/her information in the form provided in update.php, corresponding UPDATE statements are sent to the database to update entries for the given midshipman's data. Most of the data can be updated in the 'midshipmen' table, but because of the BCNF structure, calls need to be made to the other related tables accordingly.

Approving Weekend Plans - The approve.php page first performs a query on all the submitted midshipmen weekend plans, similar to check_weekends.php's query, but for those that are not currently listed in the 'approve' table. Those already reviewed populate the table below. The page uses a form with a checkbox for each entry to gather the weekend plans that the administrator wants to approve upon submission, and uses that data to write INSERT INTO statements for the 'approved' table accordingly.

Adding New Users - If an alpha associated with our administrator account (200000) - authorized by checking the current logged-in username - visits add_users.php, then they can fill out the POST form associated with creating a new user. The data from the form is used to populate multiple INSERT INTO statements necessary to create a midshipman in the database. Only administrators can perform this function, so the admin must have all the necessary data for the new user.

Workload Distribution and Files

System Files Included:

- db/

Filename:	Who Wrote It:	Who Tested It:
createTables.sql	Lani Davis	Drake Bodine
dropTables.sql	Lani Davis	Harrison Bleckley
triggers.sql	Lani Davis	Harrison Bleckley
procedure.sql	Lani Davis	Drake Bodine
generateData.sql	Drake Bodine	Lani Davis

- web/

Filename:	Who Wrote It:	Who Tested It:
README	Drake Bodine	N/A
add_incentive.php	Lani Davis	Drake Bodine
add_users.php	Harrison Bleckley	Lani Davis
add_weekend.php	Lani Davis	Harrison Bleckley
approve.php	Harrison Bleckley	Lani Davis
auth.inc.php	Drake Bodine	Lani Davis
check_incentive.php	Lani Davis	Harrison Bleckley
check_weekend.php	Drake Bodine	Lani Davis
create_incentive.php	Lani Davis	Drake Bodine
home.php	Harrison Bleckley	Drake Bodine
login.php	Drake Bodine	Lani Davis
login_functions.inc.php	Drake Bodine	Lani Davis
logout.php	Drake Bodine	Harrison Bleckley

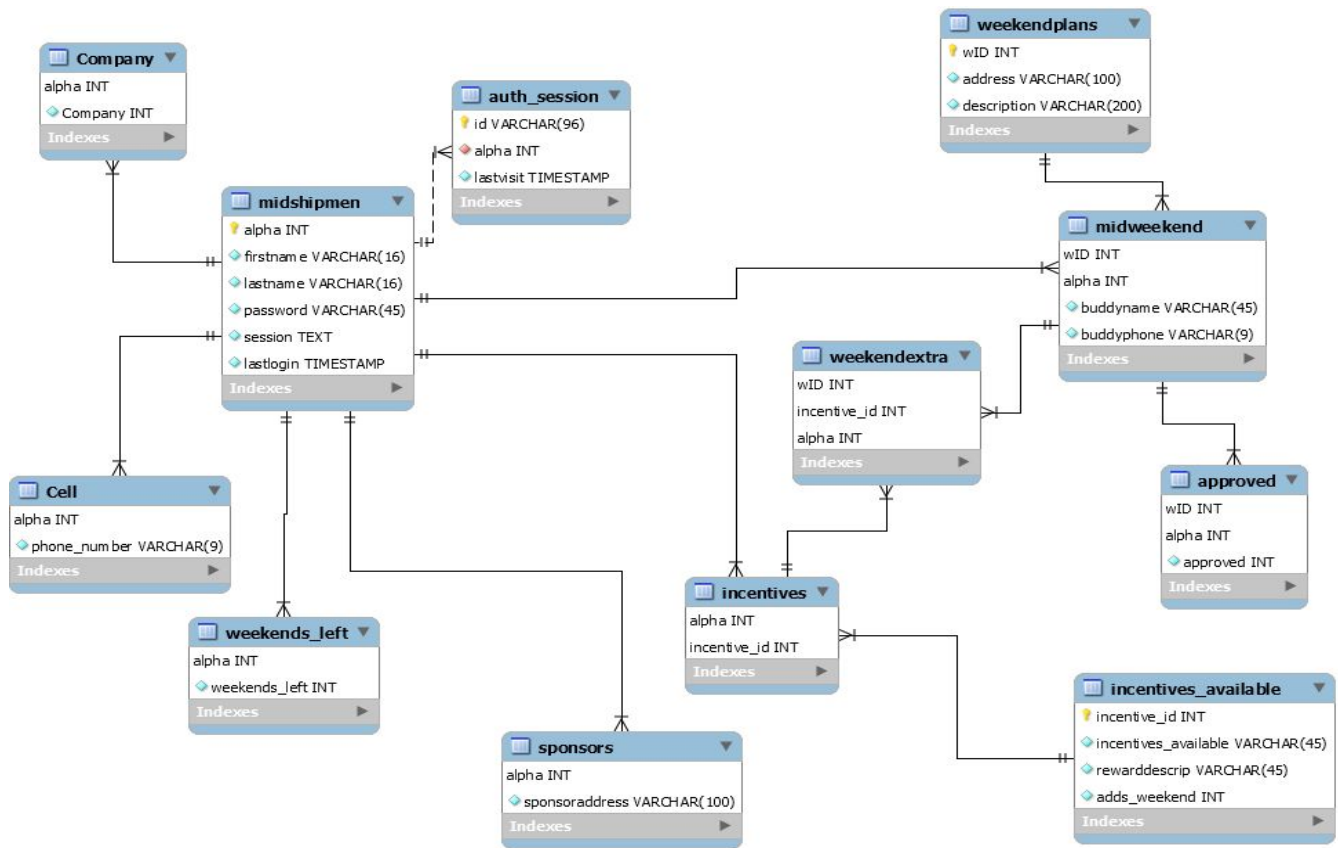
mysql.inc.php	Drake Bodine	Lani Davis
page.inc.php	Lani Davis	Harrison Bleckley
reset.php	Lani Davis	Drake Bodine
update.php	Lani Davis	Harrison Bleckley

- IT360presentation.pdf [final exam presentation]
- MilestoneEER.png [ER diagram]
- WeekendTrackerPoster.pptx [extra credit poster]
- projectIT360.mwb [visual for ER diagram]
- projectIT360.mwb.bak [visual for ER diagram]

Workload-Distribution:

- CSS/Style: Lani Davis
- ER Model: Harrison Bleckley
- ER to Relational: Harrison Bleckley
- Normalization: Lani Davis
- Sample Data Generation: Harrison Bleckley
- Login Capability: Drake Bodine
- Constraint Enforcement: Lani Davis
- Commenting and User Manual Checking: Drake Bodine
- Presentation Slides: Lani Davis
- Poster: Lani Davis
- Project report: Drake Bodine

ER Diagram



createTable.sql

```
-- MySQL Script generated by MySQL Workbench
-- Fri Apr 10 12:24:34 2020
-- Model: New Model   Version: 1.0
-- MySQL Workbench Forward Engineering

-----
-- Schema it360_weekend_tracker
-----

USE it360_weekend_tracker ;

-----
-- Table it360_weekend_tracker.midshipmen
-----
DROP TABLE IF EXISTS it360_weekend_tracker.midshipmen ;
/*alpha -> firstname, lastname, password */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.midshipmen (
  alpha INT NOT NULL,
  firstname VARCHAR(16) NOT NULL,
  lastname VARCHAR(16) NOT NULL,
  password VARCHAR(250) NOT NULL,
  session TEXT NULL,
  lastlogin TIMESTAMP NULL,
  CONSTRAINT PK_midshipmen_alpha PRIMARY KEY (alpha));

-----
-- Table it360_weekend_tracker.midshipmen
-----
DROP TABLE IF EXISTS auth_session;
CREATE TABLE auth_session (
  `alpha` INT NOT NULL,
  `id` VARCHAR(96) NOT NULL,
  `lastvisit` TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
  CONSTRAINT PK_auth_session PRIMARY KEY (id),
  CONSTRAINT FK_auth_session_alpha FOREIGN KEY(alpha)
    REFERENCES midshipmen (alpha)
    ON DELETE CASCADE ON UPDATE CASCADE
);
```

```

-----
-- Table it360_weekend_tracker.weekends_left
-----
DROP TABLE IF EXISTS it360_weekend_tracker.weekends_left ;
/* alpha* -> weekendsleft */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.weekends_left (
  alpha INT NOT NULL,
  weekends_left INT NOT NULL DEFAULT 0,
  CONSTRAINT PK_weekends_left_alpha PRIMARY KEY (alpha),
  CONSTRAINT FK_weekendsleft_midshipmen FOREIGN KEY (alpha)
    REFERENCES it360_weekend_tracker.midshipmen (alpha)
    ON DELETE CASCADE
    ON UPDATE NO ACTION);

-----
-- Table it360_weekend_tracker.incentives_available
-----
DROP TABLE IF EXISTS it360_weekend_tracker.incentives_available ;
/* incentive_id- > incentives_available, rewarddescrip, adds_weekend*/
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.incentives_available (
  incentive_id INT NOT NULL AUTO_INCREMENT,
  incentives_available VARCHAR(45) NOT NULL,
  rewarddescrip VARCHAR(45) NOT NULL,
  adds_weekend INT NOT NULL,
  CONSTRAINT PK_incentives_available_incentive_id PRIMARY KEY (incentive_id),
  CONSTRAINT AK_incentives_available_incentives_available UNIQUE
(incentives_available));

-----
-- Table it360_weekend_tracker.incentives
-----
DROP TABLE IF EXISTS it360_weekend_tracker.incentives ;
/* alpha*,incentive_id* */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.incentives (
  alpha INT NOT NULL,
  incentive_id INT NOT NULL,
  CONSTRAINT PK_incentives PRIMARY KEY (alpha, incentive_id),
  CONSTRAINT FK_incentives_midshipmen FOREIGN KEY (alpha)
    REFERENCES it360_weekend_tracker.midshipmen (alpha)
    ON DELETE CASCADE

```

```

    ON UPDATE NO ACTION,
    CONSTRAINT FK_incentives_incentivesavail FOREIGN KEY (incentive_id)
    REFERENCES it360_weekend_tracker.incentives_available (incentive_id)
    ON DELETE CASCADE
    ON UPDATE CASCADE);

```

```

-----
-- Table it360_weekend_tracker.Company
-----

```

```

DROP TABLE IF EXISTS it360_weekend_tracker.Company ;
/* alpha -> company */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.Company (
    alpha INT NOT NULL,
    Company INT NOT NULL,
    CONSTRAINT PK_Company PRIMARY KEY (alpha),
    CONSTRAINT FK_Company_midshipmen FOREIGN KEY (alpha)
    REFERENCES it360_weekend_tracker.midshipmen (alpha)
    ON DELETE CASCADE
    ON UPDATE CASCADE);

```

```

-----
-- Table it360_weekend_tracker.weekendplans
-----

```

```

DROP TABLE IF EXISTS it360_weekend_tracker.weekendplans ;
/*wID -> address, description */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.weekendplans (
    wID INT NOT NULL AUTO_INCREMENT,
    address VARCHAR(100) NOT NULL,
    description VARCHAR(200) NOT NULL,
    CONSTRAINT PK_weekendplans PRIMARY KEY (wID));

```

```

-----
-- Table it360_weekend_tracker.midweekend
-----

```

```

DROP TABLE IF EXISTS it360_weekend_tracker.midweekend ;
/* wID,alpha -> buddyname, buddyphone */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.midweekend (
    wID INT NOT NULL,
    alpha INT NOT NULL,
    buddyname VARCHAR(45) NOT NULL,
    buddyphone VARCHAR(10) NOT NULL,

```

```

CONSTRAINT PK_midweekend PRIMARY KEY (wID, alpha),
CONSTRAINT FK_midweekend_midshipmen FOREIGN KEY (alpha)
REFERENCES it360_weekend_tracker.midshipmen (alpha)
ON DELETE NO ACTION
ON UPDATE NO ACTION,
CONSTRAINT FK_midweekend_weekendplans FOREIGN KEY (wID)
REFERENCES it360_weekend_tracker.weekendplans (wID)
ON DELETE CASCADE
ON UPDATE NO ACTION);

```

```

-----
-- Table it360_weekend_tracker.sponsors
-----

```

```

DROP TABLE IF EXISTS it360_weekend_tracker.sponsors ;
/* alpha -> sponsoraddress */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.sponsors (
alpha INT NOT NULL,
sponsoraddress VARCHAR(100) NOT NULL,
CONSTRAINT PK_sponsors PRIMARY KEY (alpha),
CONSTRAINT FK_sponsors_midshipmen FOREIGN KEY (alpha)
REFERENCES it360_weekend_tracker.midshipmen (alpha)
ON DELETE CASCADE
ON UPDATE NO ACTION);

```

```

-----
-- Table it360_weekend_tracker.Cell
-----

```

```

DROP TABLE IF EXISTS it360_weekend_tracker.Cell ;
/* alpha -> phone_number */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.Cell (
alpha INT NOT NULL,
phone_number VARCHAR(10) NOT NULL,
CONSTRAINT PK_Cell PRIMARY KEY (alpha),
CONSTRAINT AK_Cell_phonenumber UNIQUE (phone_number),
CONSTRAINT FK_cell_mids FOREIGN KEY (alpha)
REFERENCES it360_weekend_tracker.midshipmen (alpha)
ON DELETE CASCADE
ON UPDATE CASCADE);

```

```

-----
-- Table it360_weekend_tracker.approved

```

```

-- -----
DROP TABLE IF EXISTS it360_weekend_tracker.approved ;
/* wID, alpha -> approved */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.approved (
    wID INT NOT NULL,
    alpha INT NOT NULL,
    approved INT NOT NULL DEFAULT 0,
    CONSTRAINT PK_approved PRIMARY KEY (wID, alpha),
    CONSTRAINT FK_approved_midweekend FOREIGN KEY (wID , alpha)
        REFERENCES it360_weekend_tracker.midweekend (wID , alpha)
        ON DELETE CASCADE
        ON UPDATE CASCADE);

-- -----
-- Table it360_weekend_tracker.weekendextra
-- -----
DROP TABLE IF EXISTS it360_weekend_tracker.weekendextra ;
/* wID,incentive_id, alpha */
CREATE TABLE IF NOT EXISTS it360_weekend_tracker.weekendextra (
    wID INT NOT NULL,
    incentive_id INT NOT NULL,
    alpha INT NOT NULL,
    CONSTRAINT PK_weekendextra PRIMARY KEY (wID, incentive_id, alpha),
    CONSTRAINT FK_weekendextra_midweekend FOREIGN KEY (wID , alpha)
        REFERENCES it360_weekend_tracker.midweekend (wID , alpha)
        ON DELETE CASCADE
        ON UPDATE CASCADE,
    CONSTRAINT FK_weekendextra_incentive FOREIGN KEY (alpha, incentive_id)
        REFERENCES it360_weekend_tracker.incentives (alpha, incentive_id)
        ON DELETE CASCADE
        ON UPDATE CASCADE);

```