Phase 2 Template:

Please use this template as a guide for what to submit for phase 2. Include team number, class, and current term in the header for all pages (show above). Also include a table of contents (TOC) as the first page of your ‘*team001_p2_ac+SQL.pdf’* with working links to navigate the task document quickly. Use consistent indentation, font sizes, and bullets to model control flow. Lastly, include consistent markup to convey meaning (bold, italic, underline, etc.) with an example shown below:

Table of Contents:

Abstract Code+SQL for each task on a single page with working **navigation links**.

Abstract Code:

Your abstract code should handle basic **data validation** (example: user cannot enter string for an int datatype) and basic **error handling** (example: user types in wrong password what happens?). Consider the IFD forms to be like web-page user interfaces where the user clicks on buttons or types input fields. *Walk us through how you get to each task and how you leave each task to get to the next one*.

Include consistent markup to convey meaning (**bold**, *italic*, underline, etc.) Include the words ‘task’, ‘form’, and ‘button’ (or similar) after every use in your abstract code so there is no confusion on intent.
Note: application variables like '$Email' are *optional depending on your language- PHP, Python, Java, Ruby*. Include inline code blocks for all SQL queries with semicolon.

Markup something similar to:

Bold Underline: Form Example: **Main Menu** form
Bold Italics: Buttons Example: ***Save*** button
Bold: Task Example: **Login** task
Italics: Form Input Fields: Example: *username, model, cost*, etc.

DB Query Code Blocks: specific targeted queries which include semicolon delimiter **‘;’** U+003B
Watch the use of the bad: left/right single quotes ‘’ vs. the good: U+27 single apostrophe '
Inline queries should be UNICODE **text** NOT IMAGES:

```
SELECT first_name, last_name, home_town FROM `User` INNER JOIN RegularUser on
RegularUser.email = User.email WHERE RegularUser.email = '$UserID';
```

DARK Blue*:* Database table names in lowercase
DARK Green: PHP Application Variables ‘$param’ (in single UNICODE 27 quotes)
Good: Grave Accent (backtick) ` = U+60 (escape character) Apostrophe ' = U+27 (good for param)
Bad: Left Single Quote ‘ = U+2018 or Right Single Quote ’ = U+2019 (*queries will fail*)
https://unicode-table.com/en/search/?q=%27
http://stackoverflow.com/questions/7857278/what-is-the-meaning-of-grave-accent-aka-backtick-quoted-characters-in-mysql

Your Queries should be specific to the result set you want to obtain from the database:
$**goodQuery** = SELECT *password* FROM user WHERE email='$enteredEmail';
$badQuery = **SELECT** * FROM user WHERE email='$enteredEmail';

Notice how the SELECT * requires the application logic to sort out the returned values and not the query.
The point of the course is to develop SQL query skills to extract exactly what you want from the database.

Grading considerations: inline queries should be able to be copy/pasted into SQL command line and run successfully based on your imported team##_p2_schema.sql.
Note: Phase2 *team001_p2_ac+SQL.pdf’* does not contain any task decomposition components:
no oval diagrams, no rules of thumb, **just the abstract code with the additional SQL code blocks**.

Feel free to post a private question: (Team## + Instructors) if you need further clarification for your project. Thank you in advance,
CS6400 Instructional Team

Table of Contents:

…etc.

Login

Abstract Code

- User enters *email* ($Email), *password* ($Password) input fields.
- If data validation is successful for both *email* and *password* input fields, then:
    - When ***Enter*** button is clicked:

```
SELECT password FROM `User` WHERE email= '$Email';
```

- If User record is found but User.password != '$Password':
    - Go back to **Login** form, with error message.
- Else:
    - Store login information as session variable '$UserID'.
    - Go to **Main Menu** form.
- Else *email* and *password* input fields are invalid, display **Login** form, with error message.

Main Menu / Navigation Bar

Abstract Code

- Show "***View Profile***", "***Edit Profile***", ***"View Friends***" ", ***"Search for Friends***" ", ***"View Requests***" ", ***"View Status Updates***", and "***Log out***" tabs in navigation bar.
- Upon:
    - Click ***View Profile*** button- Jump to the **View Profile** task.
    - Click ***Edit Profile*** button- Jump to the **Edit Profile** task.
    - Click ***View Friends*** button- Jump to the **View Friends** task.
    - Click ***Search for Friends*** button- Jump to the **Search for Friends** task.
    - Click ***View Requests*** button- Jump to the **View Requests** task.
    - Click ***View Status Updates*** button- Jump to the **View *Status Updates*** task.
    - Click ***Log Out*** button- Invalidate login session and go back to the **Login** form.

View Profile

Abstract Code

- User clicked on ***View Profile*** button from **Main Menu**:
- Run the **View Profile** task: query for information about the user and their profile where $UserID is the ID of the current user using the system from the HTTP Session/Cookie.

- Find the current User using the User.email; Display users first and last name;

```
SELECT first_name, last_name FROM `User` WHERE User.email='$UserID';
```

- Find the current RegularUser using the user Email; Display RegularUser Sex, Birthdate, CurrentCity, Hometown, and Interests.

```
SELECT first_name, last_name, gender, birthdate, current_city, home_town FROM `User`
INNER JOIN RegularUser ON `User`.email=RegularUser.email WHERE
`User`.email='$UserID';
```

- Find and display the current user interests:

```
SELECT interest FROM UserInterests WHERE email='$UserID';
```

- Find each School for the RegularUser:
  Display School name and Years Graduated;
  Find School Type;
  Display SchoolType Name;

```
SELECT school_name, year_graduated FROM Attend WHERE email='$UserID' ORDER BY
year_graduated DESC;
```

- For each Employer for the RegularUser:
  Display Employer Name and Job Titles;

```
SELECT employer_name, job_title FROM Employment WHERE email='$UserID' ORDER BY
employer_name DESC;
```

When ready, user selects next action from choices in **Main Menu**

…etc.