### Group Project 5 - Mr. Yagci's Website

### **Instructions:**

In this project, you will have the chance to dive deep on the Python Web development world. You will reinforce your knowledge of Flask routing, HTML, CSS, basic programming as well as learn new skills such as database creations, saving data on database, fetching data from database, sending emails through programming and using HTML forms.

First learn the following ideas from the given or not given resources then read the project documentation from page 3 to page 10.

### What to learn before you start the project:

- 1. What is a database and why we need it
- 2. What are the different types of Databases that we use today
- 3. How to use a relational database such as SQL database in Python
- 4. How to use HTML Forms to send data to Python code and from Python code to Database.
- 5. How to fetch data from database through Python code and from Python code to HTML web page.
- 6. How to send an email through Python powered HTML page.

#### **Resources:**

- 1. Flask
- 2. Flask HTML Forms
- 3. SQL Python Flask
- 4. Email Python Flask

This page is blank on purpose

# Mr. Yagci's Website Flask Web Programming

 $\operatorname{SDLC}$  Step 1 - Requirement Specification

### **Identification**:

Mr. Yagci, our client, is requesting an instructor website that he will use with his students. Mr. Yagci is a math teacher at one of the top community schools in the Columbus area (Ranked 4th best charter in Ohio by the US News Rankings).

Mr. Yagci needs a website where he can <u>post assignments</u> and students can <u>view</u> <u>them</u>. He also needs to a page to <u>show his background information</u>. And at last he needs students to be able to <u>contact him through</u> the website.

### Analysis:

## Analysis part must be done by each team on their own. Here are some of Mr. Farah's suggestion.

Make a stand-up meeting with your team and decide on pages, contents, which pages to make first, what tools to use and who should do what.

I would suggest that you decide to add a homepage that contains his background personal information like work experiences, educational background, etc.

I would suggest that you use a database (Relational SQL database) to record assignments. The assignments page must be get assignment data from the database are shown on the web page either as a table view or grid view

I would suggest that you create some kind of form that will allow Mr. Yagci to add assignments to the database.

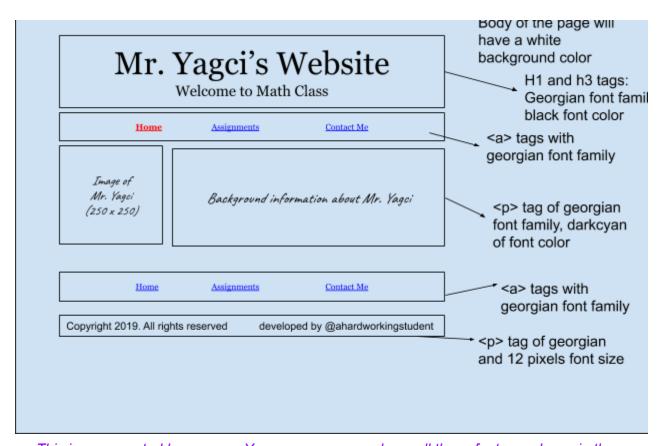
I would suggest that you use mail server so that students are able to contact Mr. Yagci through the website.

SDLC Step 2 - Design

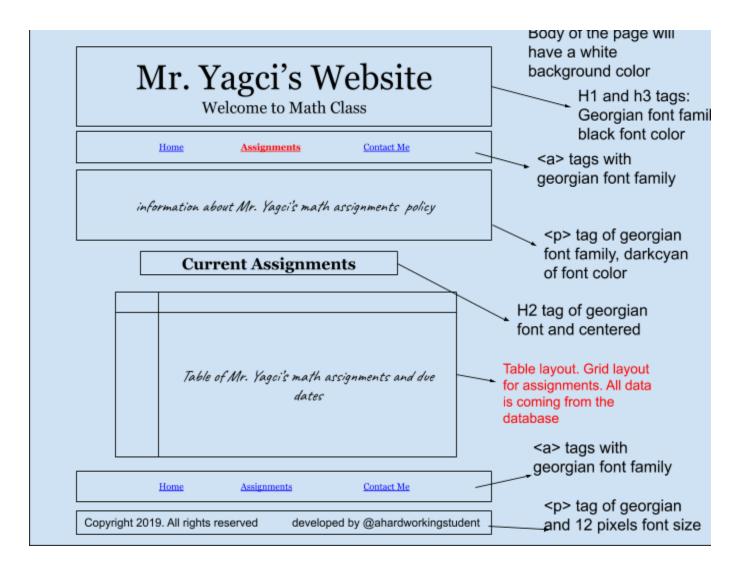
### Design:

Design part must be done by each team on their own. I highly suggest that you use creativity skills here and you come up with the best design for this website if you are good with HTML and CSS. If you are not good with HTML and CSS and you are afraid it will take a longer time than necessary then feel free to use templates that you found on the internet. (the spirit of the project is Python, Flask, Emailing through Python, SQL Database, Problem Solving, Teamwork, and exploration.)

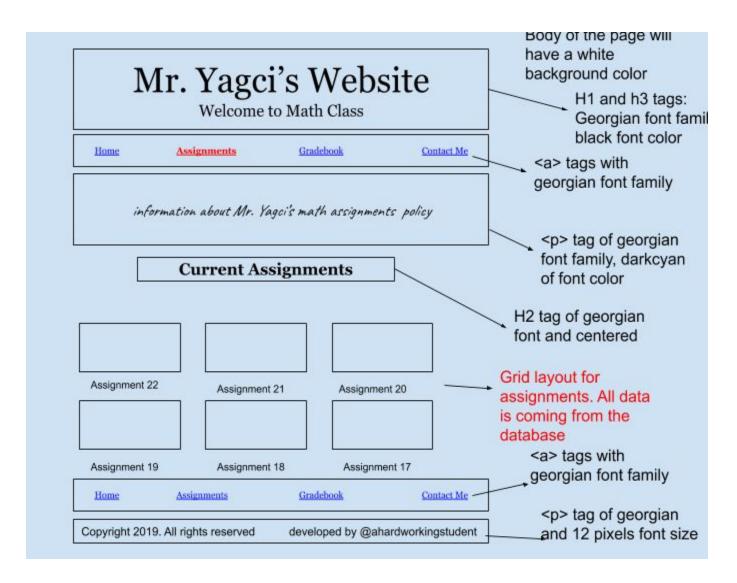
Here are some suggested website designs:



This is a suggested homepage. You may or may nor have all these features shown in the design.



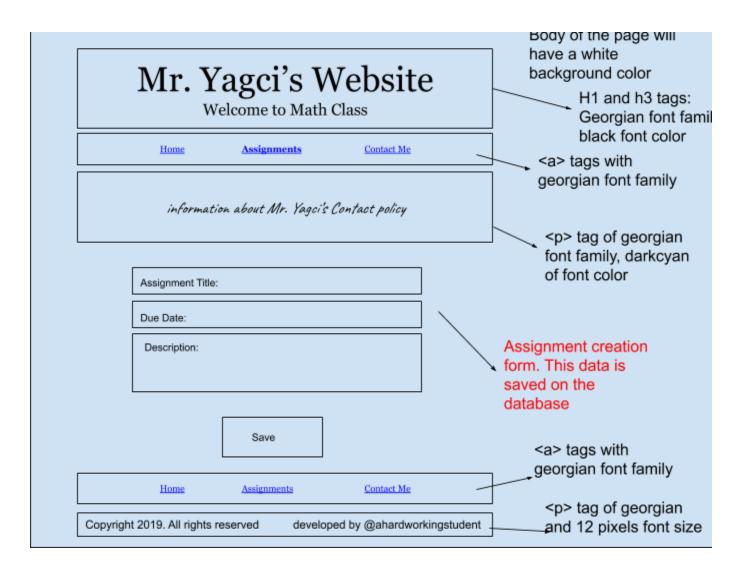
This is a suggested **assignment page 1**. You may or may nor have all these features shown in the design.



This is a suggested **assignment page 2**. You may or may nor have all these features shown in the design.

Mr. Yagci's Website Welcome to Math Class  Home Assignments Contact Me	have a white background color  H1 and h3 tags: Georgian font famil
is Commentation of most May Visually Construct and the	<a> tags with georgian font family</a>
information about Mr. Yagci's Contact policy  Student name:	tag of georgian font family, darkcyan of font color
Student email:  Subject line:	
Message:	Contact form.  Messages go to Mr.  Yagci's email
Send	<a> tags with georgian font family</a>
Home Assignments Contact Me  Copyright 2019. All rights reserved developed by @ahardworkingstudent	tag of georgian and 12 pixels font size

This is a suggested **contact page**. You may or may nor have all these features shown in the design.



This is a suggested **Assignment Creation page**. You may or may nor have all these features shown in the design.