**Home Assignment – 1  
Total Points: 100  
Due Date: Feb 21, 2022, 11.59 pm (through blackboard)**

***Please note that this is an individual assignment. Each student is expected to produce their own work.***

1. During the class we discussed the most common types of software architectures and architecture patterns. Over the last few years, Service Oriented Architecture and Microservices pattern have gained importance and are being widely used. I would like you to research the Internet to understand Service Oriented Architectures and Micro architectures and provide a write up in your own words based on your understanding on these two concepts using at least 1-2 pages each. (25 points)

Service-Oriented Architecture, it consists of many stages or steps to ensure stable evolution of application development. In case where during the development of large project applications, any additional feature can be made reusable when implemented into the current interface.

SOA architecture provide proper communication using specialized streamlined service integration in application. Service-Oriented Architecture function in a way that it make the process of assembling component more accessible and with proper functionality. These types of oriented architecture development allow users to utilize numerous services to develop their application. Provide mean to integrate component in a decentralized system. Allow package to be more compatible when it being integrated into another different software system.

Service-Oriented Architecture principle consists of Standard Service Contract, Interoperability, Composability, Abstraction, Discoverability, and Stateless. With these core principle, service provider can work in conjunction with service registry. Improve responsiveness to unusual change in workflow to align with customer need and services quality. Cut down time due to use the advantageous of reusability of component. Easier time to maintain because of modular approach of the architecture. Make the system flexible enough for scalability, which it can produce other byproduct. Use the agile aspect to make standardization which can it compatible with other system and become platform independent.

Such advantageous Oriented Architecture development process is also come with couple notable risk or limitations. Large and complex service can be harder to manage. As the service’s complexity grow, performance and other internal issue can cause huge problems for real-time development.

1. **Wireframing:**

Use the wireframing tool (any freely available tools on Internet like Balsamiq) to create wireframe mock-ups of either your favorite website or mobile app. Make sure to wireframe at least three screens (webpages). Copy and paste the wireframe mockups in the assignment document. (25 points)

1. **Personal Web Site:**

You will create a personal website using the HTML, CSS and Bootstrap topics that we are covering in the class. The HTML document will only define the structure and content of the webpage and all the styling information would be provided through an external CSS page/bootstrap that will be linked to the webpage.

The following information would need to be provided/demonstrated through this web page.

* 1. Save your webpage as ***index.html***
  2. Define an appropriate structure for your website. You can read out the structure here: <https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML/Document_and_website_structure>
  3. Provide your name and major
  4. Your picture or any other picture.
  5. A paragraph providing a short biography about you and your aspirations.
  6. A table depicting your weekly schedule including classes and any working hours.
  7. Links to some of your favorite sites.
  8. A bulleted list of your favorite movies or books
  9. An ordered list of hobbies or fun things you like to participate in.
  10. Any other information that you would like to provide to enrich the personal website.

Please note your grade for the Personal Web site will be determined not only on the actual html structure and content but also on the creative and aesthetic ways you have defined the style elements in the CSS page. (50 points)

***You will be also be uploading your website to your web account on the CS server. I will provide additional information about your web server account and details on uploading your Personal Web Site to your web account.***

**Copy and paste the source code of the html file as well as the CSS file in a word document and URL to your website and submit the word document in Blackboard.**