In era of everything moving towards, it is important to have ePortfolio for getting noticed by the recruiters and employers. With pandemic situation and everyone being virtual, it has become even more important than ever. ePortfolio should include personal information, education qualifications, skills set, professional & personal achievements, work experiences and projects, testimonials and community / volunteer work etc. The benefits of having ePortfolio include but not limited to providing easy access to employers, demonstrate knowledge and skills, showcase snippets of project work, links to newsletters etc. In addition, it gives an opportunity to really organize the information like what can be highlighted and bring forefront, provides authenticity to the information since everyone can access it and last but not least, technical skills can be creatively demonstrated by designing ePortfilo intuitively and making it interactive rather completely text based. For example, web developer can demonstrate the UI/UX and technical skills by creatively designing the ePortfolio.

Along with many benefits, the ePortfolio invites challenges if created poorly and inaccurately. Projects involving team work should be reflected accordingly by highlighting the individual’s contribution. Otherwise, it could give a wrong perception about the individual’s activities in team project. Make sure you have taken permission for the presentations, papers and code snippets planned to be included to avoid intellectual property issues. Follow an intuitive design and organize the information to enhance the readability of the ePortfolio. The poorly designed ePortfilio will not attract recruiters, basically may get ignored. Ensure that ePortfolio is device friendly, in other words it should load properly on laptop, desktop, tablets and mobile etc. irrespective of screen size. In other words, the ePortfolio should be designed using responsive web technology such as HTML5 otherwise it will limit certain device users. It may take some time to really build a good ePortfolio from scratch with technical and design skills required. One way to overcome is to use online tools and templates to build the ePortfolio.

In summary, it is important to have an ePortfilio with intuitive design and accurate information to get noticed and marketed better.

**References:**

<https://skillcrush.com/blog/impressive-tech-portfolio/>

<https://sfepiphanyportfolios.weebly.com/advantages--disadvantages.html>

<https://abj.artrepreneur.com/top-design-portfolio-tips/>

**Part Two:** I have selected the artifacts for all three categories and started working with “software designing/engineering” category and please find latest status for all categories below.

**Software designing/engineering:** I am at the status checkpoint 3, submitted; awaiting instructor feedback. The enhancements include adding documentation to code, removing unused code and variables, re-designing “AddUser” component to allow user to create account only when username is not taken by anyone else. In addition, updated the code to create password length to be of minimum 6 chars.

**Algorithms and data structures:** I am at the status checkpoint 2 for this category of artifact, working on the initial enhancements. I am analyzing the secure coding standards for data structures, to be added to Security testing template. For now, I have analyzed one secure coding standard – “Always initialize pointers values to nullptr” out of 3 planned. Data structures is a complex topic and taking time to really research and come up secure coding standards and examples to add to the security template.

**Databases:** I am at the status checkpoint 2 for this category of artifact, working on the initial enhancements. I have planned to re-write MySQL inner join query with advanced joins such as outer join, left and right join. I have read through different join types but the challenge is getting to a virtual machine where MySQL is installed and accessed in the “DAD 220: Introduction to SQL” course (or) finding an online place to execute newly written SQL join queries.