**5-1 Journal Computer Science Trends and Artifact Update**

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The two significant trends I would like to discuss are Artificial Intelligence and Cloud Computing. Without a doubt the impact of AI within the last few years have notable in many different areas. As AI has become a buzzing word for everyone around the globe and its impact on people, society and economy can be either beneficial or also destructive. The impact on computer science is quite wild from different perspectives. As AI models are advancing in generating apps functionalities based on zillions of resources like docs, knowledge bases and github, AI models are posing a major issue in the market as companies start relying on fewer engineers with the help of AI models. Notably, AI cuts the time massively in developing applications, though it’s not very reliable. As a developed, I consider AI model as a starting point for repeating tasks, but I do have to vet the generate outcome and not a reference for actual work. The second trend is Cloud computing which became the backbone for almost all industries infrastructures. Pay as you go (PAYG) became a very successful model in infrastructure consumption, cloud has advanced a lot of industries, improved the quality of the applications and increased the security measures for products. Cloud computing has flourished the software industry with abundant opportunities and new still sets, added Infrastructure as Code in developers’ back pockets. Infrastructure doesn’t need reservation or months on installations and specialized professionals to provision the needed infrastructure. IaC increased the possibilities of research and development, facilitating the projects’ deployments, adopting DevOps has been a major enhancement in developers’ world.

**Status Checkpoints for All Categories**

**Artifact: Web Application (Pet Shelter)**

I finished all the necessary work on the project and provided a readme file to show the process of installing the dependencies and screenshots

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| --- | --- | --- | --- |
| **Checkpoint** | **Software Design and Engineering** | **Algorithms and Data Structures** | **Databases** |
| **Name of Artifact Used** | Pet Shelter |  |  |
| **Status of Initial Enhancement** | Done | Done | Done |
| **Submission Status** | Done | Done | Done |
| **Status of Final Enhancement** | Done | Done | Done |
| **Uploaded to ePortfolio** | Done | Done | Done |
| **Status of Finalized ePortfolio** | Done | Done | Done |

**Artifact: Mobile Application**

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| --- | --- | --- | --- |
| **Checkpoint** | **Software Design and Engineering** | **Algorithms and Data Structures** | **Databases** |
| **Name of Artifact Used** | Mobile App |  |  |
| **Status of Initial Enhancement** | In Progress | Done | In Progress |
| **Submission Status** | In Progress | Done | Work in Progress |
| **Status of Final Enhancement** | Not Completed | Done | Not Completed |
| **Uploaded to ePortfolio** | Not Completed | Done | Not Completed |
| **Status of Finalized ePortfolio** | Planned | Planned | Planned |