

D602 Deployment - Task 1

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A:OBJECTIVES

The objectives of MLOps, or Machine Learning Operations, are to increase efficiency and scalability using machine learning. MLOps can make deployment and maintenance to a system or project easier and more efficient. If the operations are able to be automated, the company can save a lot of time and effort that they would normally spend forging connections between existing projects and the updates and changes any developers would want to make.

B:CONSTRAINTS

Perhaps the biggest obstacle when implementing MLOps is that the system can have a technological barrier of entry. The system is only useful and efficient if the people making developments understand how to use the system and are willing to leave behind less efficient methods. In addition, people will need to be trained and the operations will need to be supervised and managed. Also designing systems for multiple programming languages can be difficult since the employees currently program in both Python and R.

C:REQUIREMENTS

For the system to increase efficiency and scalability, we will need to train and retrain the machine learning programs. An initial model will likely not be optimized for our project, so we will be required to retrain until the MLOp is more efficient than our current system. We will also need a CI/CD system so we can constantly add updates to the system while it is still fully operational for what we need it for. In addition, we will need a central repository for the project and we would need to address security and access issues.

Sources

No sources were used except for official WGU course material.