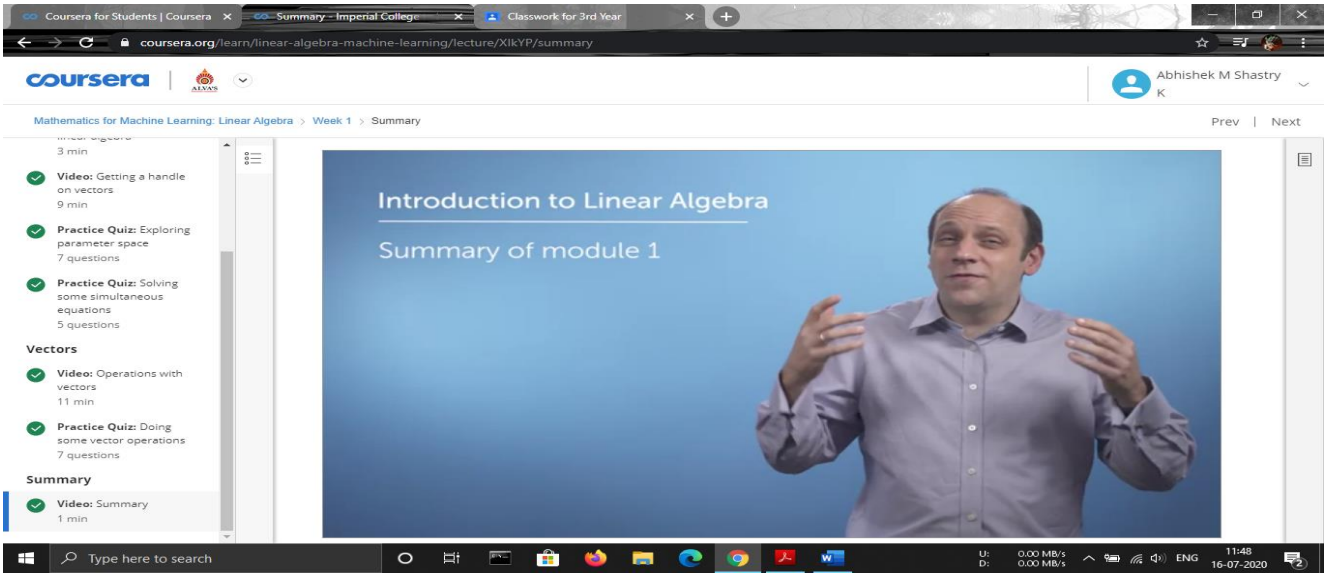
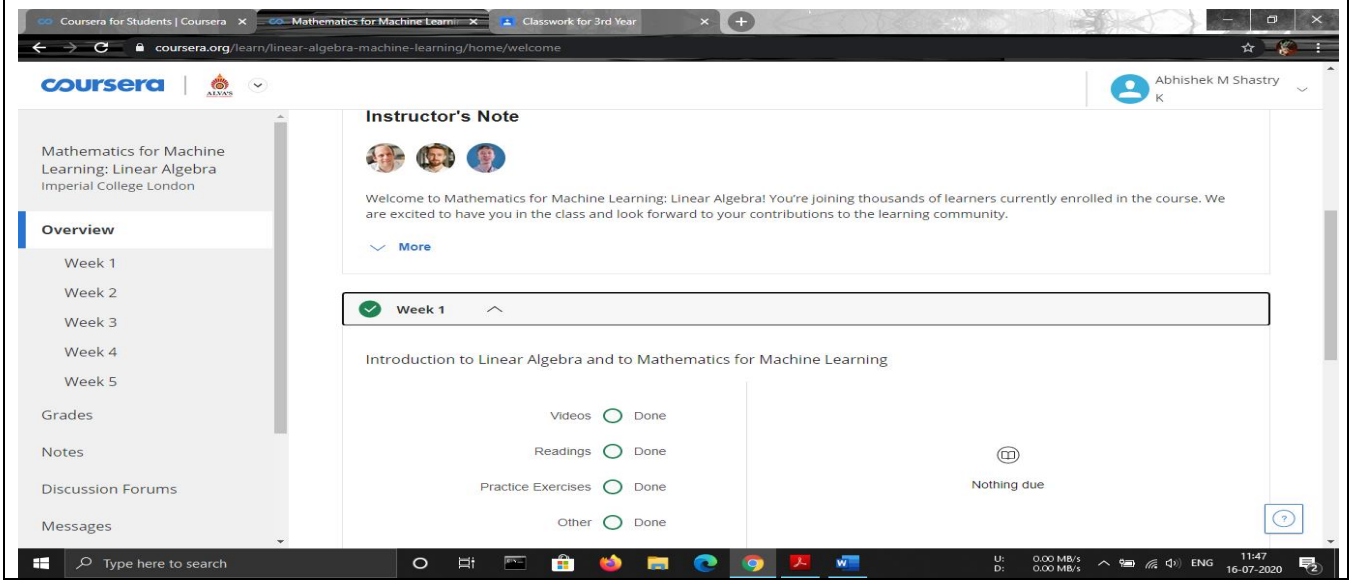
DAILY ASSESSMENT REPORT

Date:	13/07/2020	Name:	Abhishek M Shastry K
Course:	Mathematics for Machine Learning: Linear Algebra	USN:	4AL17EC002
Topic:	Week 1	Semester & Section:	6th 'A'
Github Repository:	AbhishekShastry-Courses		

SESSION DETAILS

Image of session





Report

Week 1

- So, in this first module of our course on Linear Algebra, we first looked at the problem of data, that our world has so much of it. And then if we could figure out how to analyze and use it, we could really solve problems in the world.
- And we've looked at where these courses fit in terms of helping us access the world of machine learning and data science. Then we've moved on to look at some example problems, the problem of solving some simultaneous equations.
- For example, to discover the price of things in the apples and bananas problem, or the problem of fitting a model equation with some fitting parameters we want, to optimize against some data. We've then said that both of these problems are going to involve vectors and possibly some calculus.
- So, we've started off our journey with vectors and with defining vector addition and scalar multiplication. In the next module, we'll go further to look at some more operations with vectors, and define what we mean by a vector space, and the coordinate system of a vector space or its basis.
- **Key Concepts**
    - ✓ Recall how machine learning and vectors and matrices are related.
    - ✓ Interpret how changes in the model parameters affect the quality of the fit to the training data.
    - ✓ Recognize that variations in the model parameters are vectors on the response surface that vectors are a generic concept not limited to a physical real space.
    - ✓ Use substitution / elimination to solve a fairly easy linear algebra problem.
    - ✓ Understand how to add vectors and multiply by a scalar number.