DAILY ASSESSMENT REPORT

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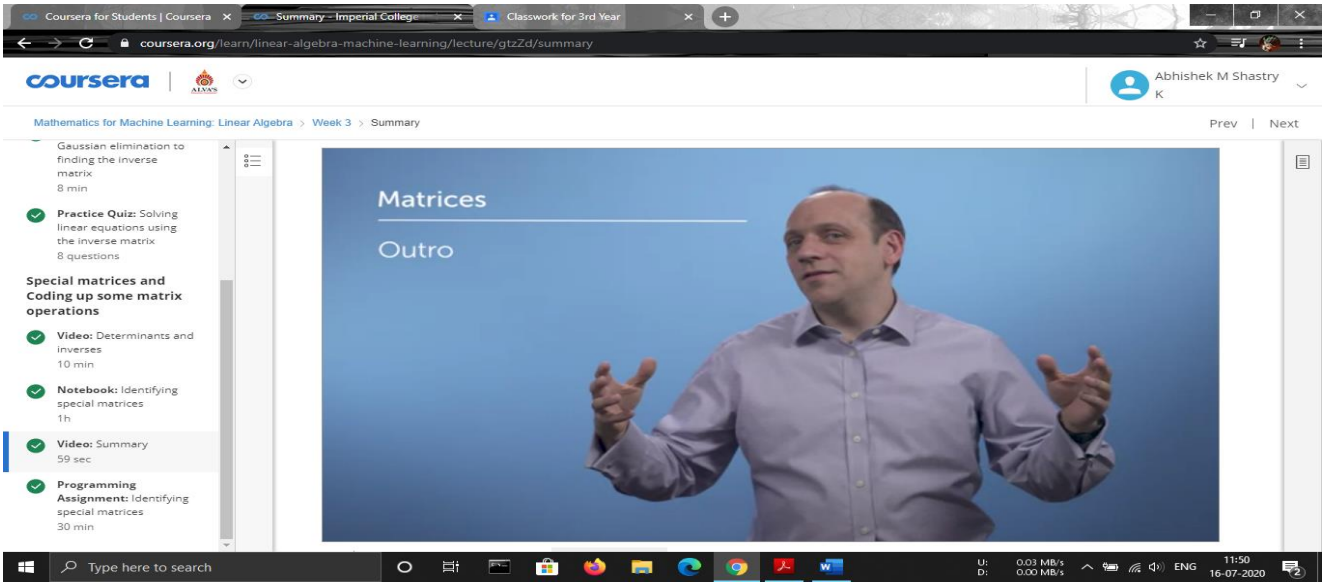
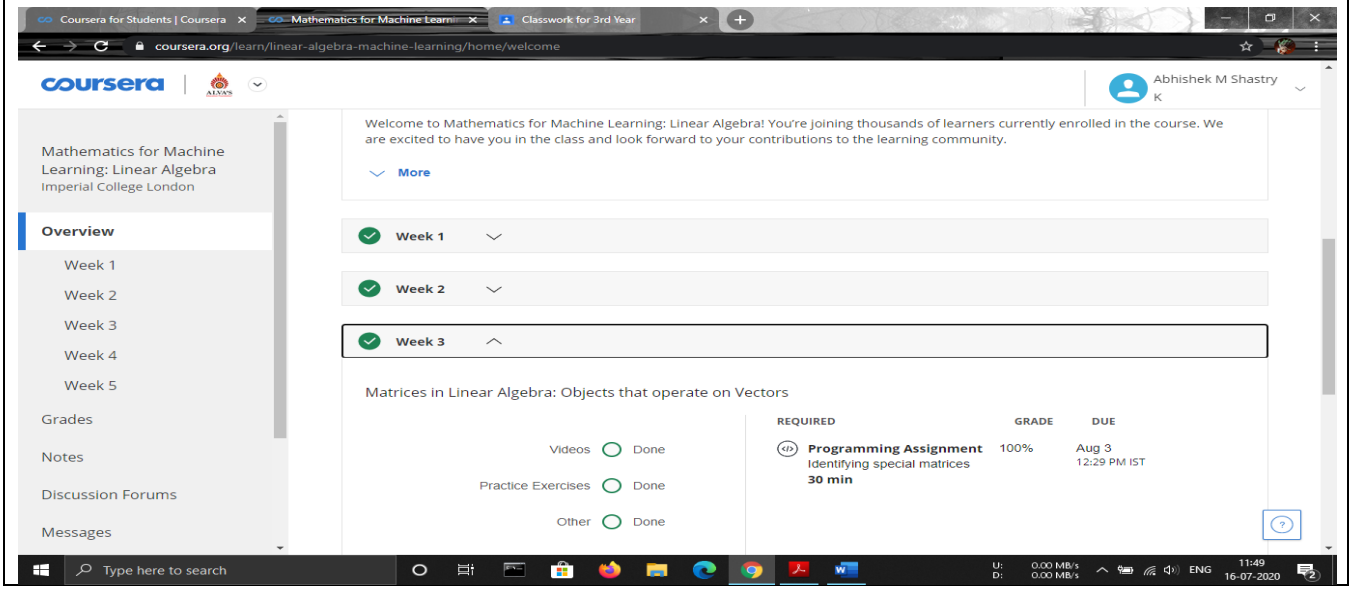
Course:	Mathematics for Machine Learning: Linear Algebra	USN:	4AL17EC002
Topic:	Week 3	Semester & Section:	6th 'A'
Github Repository:	AbhishekShastry-Courses		

SESSION DETAILS

Image of session





Report

Week 3

- So, what we've done in this last video in this module is look at the determinant, how much we grow space, the area change.
- We've also looked at the special case where the determinant is zero and found that that means that the basis vectors aren't linearly independent, and then that means that the inverse doesn't exist.
- So, in this first module on matrices, what we've done is define what a matrix is, it's something that transforms space.
- We've looked at different archetypes of matrices, like rotations, and inverses, and stretches, and shears, and how to combine them by doing successive transformations, matrix multiplication or composition.
- Then, we've looked at how to solve systems of linear equations by elimination and how to find inverses. And then finally, we've looked at determinants and linear independence. And next week, we'll carry on and look at matrices in some more detail.
- **Key Concepts**
    - ✓ Understand what a matrix is and how it corresponds to a transformation.
    - ✓ Explain and calculate inverse and determinant of matrices.
    - ✓ Identify and explain how to find inverses computationally and what goes wrong.