Unit 4 Data analytics – Introduction

Slide 1:

* Welcome to the Unit 4 Data analytics presentation as part of the VCE Applied Computing Study Design for 2020–2023.
* The purpose of this presentation is to introduce you to Unit 4 Data analytics and to provide you with a brief overview of the outcomes.

Slide 2:

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Slide 3:

* We will now have a look at Unit 4 Data analytics.

Slide 4:

* In Unit 4 Data analytics there are the two following outcomes:
* Outcome 1 – Development and evaluation
* Outcome 2 – Data and information security

Slide 5:

* We will now have a look at Unit 4 Outcome 1 Development and evaluation.

Slide 6:

* This table gives you an overview of the relationship between the:
* Key concepts
* Problem-solving methodology stages
* and the key knowledge within the outcome
* In Unit 4 Outcome 1 Development and evaluation we are dealing with:
* Digital systems
* and Problem-solving with the stages of development and evaluation to produce infographics or dynamic data visualisations
* Notice that the SAT structure involving the PSM stages of Development and Evaluation now aligns with Software development.
* The key knowledge is briefly listed on the right of the table.

Slide 7:

* In Unit 4 Outcome 1 Development and evaluation, students should be able to:
* develop and evaluate infographics or dynamic data visualisations
* present findings in response to a research question, and
* assess the effectiveness of the project plan in monitoring progress.
* Software tools will involve:
* At least one data manipulation tool and one visualisation tool, for example database software, spreadsheet software, data visualisation software and a tool for planning a project.
* The SAT task for Unit 4 Outcome 1 will contribute 15 per cent to the study score. Both Unit 3 Outcome 2 and Unit 4 Outcome 1 contribute 30 per cent to the study score.

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* Students will:
* monitor, modify and annotate project plans
* propose and implement procedures for managing files
* develop infographics or dynamic data visualisations
* select and apply data validation and testing techniques
* make necessary modifications
* evaluate the infographics or dynamic data visualisations, and
* assess the project plan.
* The assessment task is Part 2 of the SAT whereby:
* students will address the development and evaluation stages of the problem-solving methodology, and
* students will address the VCAA SAT Criteria.

Slide 9:

* We will now have a look at Unit 4 Outcome 2 Data and information security.

Slide 10:

* This table gives you an overview of the relationship between the:
* Key concepts
* and the key knowledge within the outcome
* In Unit 4 Outcome 2 Data and information security we are dealing with:
* Digital systems
* Data and information
* and Interactions and impact.
* The key knowledge is briefly listed on the right of the table.

Slide 11:

* In Unit 4 Outcome 2 Data and information security, students should be able to:
* respond to a teacher-provided case study
* investigate the current data and information security strategies of an organisation
* examine the threats to the security of data and information, and
* recommend strategies to improve current practices.
* The task will contribute 10 per cent to the study score and the total marks will be out of 100.

Slide 12:

* Students will:
* analyse and discuss current data and information security strategies
* propose and apply criteria to evaluate data and information security strategies
* identify and evaluate threats to the security of data and information
* identify and discuss possible legal and ethical consequences, and
* recommend and justify strategies to improve data and information security practices
* The assessment task is a SAC whereby:
* Students will respond to a teacher-provided case study, and
* students will address the VCAA performance descriptors.

Slide 13:

* For further information please contact:
* The Curriculum Manager of Digital Technologies at the Victorian Curriculum and Assessment Authority.
* Thank you for watching this video.