XJTLU Entrepreneur College (Taicang) Cover Sheet

Module code and	IFB106TC, Demand Forecasting and	Management	
Title			
School Title	School of Intelligent Finance and Bus	iness	
Assignment Title	Case Study: Amazon Web Services		
Submission	3 June 2024		
Deadline			
Final Word Count 800 words			
If you agree to let the university use your work anonymously for			
teaching and learning purposes, please type "yes" here.			

I certify that I have read and understood the University's Policy for dealing with Plagiarism, Collusion and the Fabrication of Data (available on Learning Mall Ordine). With reference to this policy I certify that:

My work does not contain any instances of plagiarism and/or collusion.
 My work does not contain any fabricated data.

By uploading my assignment onto Learning Mall Online, I formally declare that all of the above information is true to the best of my knowledge and belief.

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	Scoring Fo	r Tutor Use	
Student ID	$\mathcal{O}(\mathcal{O})$	7	
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Students

Submission deadline: Monday 3 June 2024

Your answers to the case study must be submitted via Learning Mall Online to the correct drop box by **5 pm on Monday 3 June 2024**. Only electronic submission is accepted and no hard copy submission.

All students must download their file and check that it is viewable after submission. Documents may become corrupted during the uploading process (e.g. due to slow internet connections). However, students themselves are responsible for submitting a functional and correct file for assessments.

Introduction: Amazon Web Services

Amazon Web Services (AWS) is a cloud computing company. It offers cloud products and services to businesses worldwide. For a specific region, AWS provides ten cloud products. Their demand data from 10 October 2021 to 1 March 2024 are provided in the Excel sheet "dataset1" (This data file is available on XJTLU Learning Mall online). The manager assigned you a task to choose one out of ten products, and your choice is product 1807ffa2c1c84035f4346c3364104dd1 (you can name it product A). Build a forecast model, and make a forecast for the period between 2 March 2024 and 7 June 2024 considering the following questions.

For this case study, students should be grouped in groups of 5-6 students. One group member must be designated as the group leader for leading the project group. Any changes of members of the project group should be communicated to the module leader.

- For Questions Land 2, each group must submit a group report in Word format and an Excel file containing calculations (70%).
- For Questions 3, each student must submit an indevitual report in Word format and an Excel file containing calculations (30%).

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.Model Building. Based on the historical data provided in the sheet "dataset1", build a forecast model and explain how this model is built. (Group question – 40 Marks, 400 words limit)

- 2. Model Evaluation. Work in a group and evaluate the forecast model built in the previous task. (Group question 30 Marks, 300 words limit)
- **3.Forecasting and Visualisation**. Using the forecast model built in task 2, predict the demand from 2 March 2024 to 7 June 2024. Then, consider the actual demand data from 2 March 2024 to 7 June 2024, which are in the Excel sheet "dataset2". Show a

time-series graph with the actual data and values that the forecast model would predict. (Indevitual question – 30 Marks, 100 words limit)

Submission Date

The report and calculation details must be submitted to Learning Mall by 5 pm on Monday 3 June 2024 (Beijing Time)

Marking Rubric

The report is marked for the five tasks mentioned above (i.e., model building, model evaluation, forecasting, visualisation, and inventory management).

Attributes	Marks
Model Building:	40%
There is evidence of a proper understanding of various forecasting models.	11,
The explanation is understandable and in-depth.	
Model Evaluation:	30%
Appropriate and correct methods are adopted for model evaluation.	
Forecasting and Visualisation:	30%
Forecasts for future demand are correct and clear demonstrations.	
The plot is clear, and detailed explanations are provided.	

Performance Descriptor

	Grade	Point Scale	riteria to be satisfied
	A	80+	• Outstanding work that is at the upper limit of
		XX	performance.
		X	• Work would be worthy of dissemination under
			appropriate conditions.
	_0) ~ () X	Mastery of advanced methods and techniques at a
			level beyond that explicitly taught.
_	\ \'x	\cdot	• Ability to synthesise and employ in an original way
			idea from across the subject.
ノ			• There is evidence of an outstanding contribution.
		O'	• Excellent presentation.
. (///	•	• Outstanding command of critical analysis and
			judgment.
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	В	70 - 79	 Excellent range and depth of attainment of intended learning outcomes.
			 Mastery of a wide range of methods and techniques. Evidence of study and originality clearly beyond the
			bounds of what has been taught.
			There is evidence of an excellent individual
			contribution.
			Excellent presentation.
			• Able to display a command of critical thinking,
			analysis, and judgment.
	С	60 - 69	Attained all the intended learning outcomes for a
			module or assessment.
			Able to use well a range of methods and techniques
			to come to conclusions.
			• Evidence of study, comprehension, and synthesis
			beyond the bounds of what has been explicitly taught.
			Very good presentation of material
			Able to employ critical analysis and judgment.
	D	50- 59	• Some limitations in the attainment of learning
			objectives but has managed to grasp most of them.
			Able to use most of the methods and techniques
			Mught.
			• Evidence of study and comprehension of what has
			been aught
			Adequate presentation of material.
			Some grasp of issues and concepts underlying the
			techniques and material taught.
	E	40 - 49 ×	• Limited attainment of intended learning outcomes.
		~~	Able to use a proportion of the basic methods and
		*	techniques taught.
			• Evidence of study and comprehension of what has
	/// /	\mathbf{d}^{\bullet} . \mathbf{c}^{\bullet}	been taught, but grasp insecure.
		V ~ !	Poorly presented.
	X		Some grasp of the issues and concepts underlying the
(2)'(techniques and material taught, but weak and
20	L		incomplete.
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F	0 - 39	 Attainment of only a minority of the learning outcomes. Able to demonstrate a clear but limited use of some of the basic methods and techniques taught. Weak and incomplete grasp of what has been taught. Deficient understanding of the issues and concepts underlying the techniques and material taught. Attainment of nearly all the intended learning outcomes deficient. Lack of ability to use at all or the right methods and techniques taught. Inadequately and incoherently presented. Wholly deficient grasp of what has been taught. Lack of understanding of the issues and concepts underlying the techniques and material taught Incoherence in the presentation of information that hinders understanding
G	0	No significant assessable material absent, or assessment massing a "must-pass" component.
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