

09 IT Software Solutions for

WorldSkills Standards Specific

Section	WSSS Marks
1	Work organization and management
2	Communication and interpersonal skills
3	Problem solving, innovation, and creativity
4	Analysing and designing software solutions
5	Developing software solutions

Criteria

ID	Name
A	Work organization and management
B	Communication and interpersonal skills
C	Problem solving, innovation, and creativity
D	Analysing and designing software solutions

E	Developing software solutions
F	
G	
H	
I	

Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
A1	Session 1 - Correct delivery of all tasks	1	M	Proper time and work management that results in correct delivery	
A2	Session 2 - Correct delivery of all tasks	2	M	Proper time and work management that results in correct delivery	
A3	Session 3 - Correct delivery of all tasks	2	M	Proper time and work management that results in correct delivery	
A4	Session 4 - Correct delivery of all tasks	3	M	Proper time and work management that results in correct delivery	
A5	Session 5 - Correct delivery of all tasks	3	M	Proper time and work management that results in correct delivery	
A6	Session 6 - Correct delivery of all tasks	4	M	Proper time and work management that results in correct delivery	

Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
B1	Session 1 - Correct understanding of all tasks	1	M	Proper understanding of the technical documentation and applica	0 1 2 3
B2	Session 2 - Correct understanding of all tasks	1	M	Proper understanding of the technical documentation and applica	
B3	Session 3 - Correct understanding of all tasks	1	M	Proper understanding of the technical documentation and applica	
B4	Session 4 - Correct understanding of all tasks	1	M	Proper understanding of the technical documentation and applica	
B5	Session 5 - Correct understanding of all tasks	1	M	Proper understanding of the technical documentation and applica	
B6	Session 6 - Correct understanding of all tasks	1	M	Proper understanding of the technical documentation and applica	
B7	Session 7 - Correct implementation of wireframe	1	M	Wireframe diagrams are provided as instructed	
B8	Session 7 - Correct design of wireframe diagram	1	J	Wireframe diagrams are designed as instructed	
Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
C1	Session 1 - Problem solving in Asset managemen	1	M	Search in asset catalogue functions as instructed	

			M	Registering and editing assets	
C2	Session 2 - Problem solving in EM Management	1	M	Asset transfers	
			M	Understand the way data is laid out and create the correct data s	
C3	Session 3 - Problem solving in Preventive maint	1	M	Understand the way data is laid out and create the correct data s	
C4	Session 4 - Problem solving in Inventory manage	1	M	Understand the way data is laid out and create the correct data s	
C5	Session 5 - Problem solving in offline mode	1	M	Understand the way data is laid out and create the correct data s	
			M	The need for an updated local database	
			M	The need for data sync between local and remote database	
C6	Session 6 - Problem solving in making the repor	1	M	Understand the way data is layed out and create the correct data	
Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
D1	Session 1 - Acceptable analysis and perception	1	M	There are clear signs that the solution conforms to what has been	
			M	Data connection has been successfully implemented as instructed	
D2	Session 2 - Acceptable analysis and perception	1	M	There are clear signs that the solution conforms to what has been	

			M	All the data need to be analyzed to conform with instructions in R
			M	All the data need to be analyzed to conform with instructions in E
D3	Session 3 - Acceptable analysis and perception	1	M	There are clear signs that the solution conforms to what has been
			M	There are clear signs that the solution has the application standa
D4	Session 4 - Acceptable analysis and perception	1	M	There are clear signs that the solution conforms to what has been
			M	Batch number is implimented correctly throughout the application
			M	All the tables and fields are there and the relationships are set co
D5	Session 5 - Acceptable analysis directives for we	1	M	There are clear signs that the solution conforms to what has been
			M	Data connection has been successfully implemented as instructe
D6	Session 6 - Acceptable analysis and perception	3	M	There are clear signs that the solution conforms to what has been
			M	Shows proper understanding of allocation methods
			M	Shows proper understanding of the queries for column chart
D7	Session 7 - Database design is tailored to meet	4	M	All the tables and fields included and created correctly show unde

D8	Session 7 - Use case diagram requested repres	4	M	The relationships are correctly drawn to fulfill the needs	0 1 2 3
			M	All the objects are represented in the diagram	
			J	The layout of the diagram is up to industry standards	
Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
E1	Session 1 - Managing Assets	1	M	The submitted contents fully represent the identity as described	
			M	Implementation of the asset list as instructed	
			M	Search and filter work as described	
			M	Identify correctly that the mobile device is rotated	
			M	Managing the assets (registering/editing)	

E2	Session 2 - Emergency maintenace managemer	1	M	Managing the asset transfer
			M	View transfer history
			M	The submitted contents fully represent the identitty as described
			M	Login to system
			M	Managing EM request by accountable party
			M	Register a new EM request
			M	Managing EM request by maintenace manager
			M	Emergency maintenance request details
E3	Session 3 - Managing preventive maintenance ta	1	M	The submitted contents fully represent the identitty as described
			M	List of Active Preventive tasks
			M	Filter list of PM task works correctly

E4 Session 4 - Inventory Management

1

- M Registering new PM task as described

- M If daily PM tasks are generated as described
- M If weekly PM tasks are generated as described
- M If monthly PM tasks are generated as described
- M If milage PM tasks are generated as described

- M Proper design of inventory management form with all the features
- M Inventory Management: Sorting applied to comply with requirements

- M Inventory Management: Correct retrieval and display of records
- M Inventory Management: Correct operation of action buttons

- M Proper design of purchase order form with all the features requested
- M Purchase Orders: Part name and batch number works correctly

- M Purchase Orders: Correct operation of the form
- M Proper design of warehouse management form with all the features requested
- M Warehouse Management: Part name and batch number works correctly

E5	Session 5 - Managing Wells	1	M	Warehouse Management: Correct operation of the form
			M	Proper design of inventory report form with all the features requested
			M	Inventory Report: Results are shown as expected
			M	The submitted contents fully represent the identity as described
			M	Proper design of well layers form with all the features requested
			M	Layers drawn are representative of the selected well
			M	Proper design of new wells registering form with all the features requested
			M	Storing and validating new well data
			M	Proper design of new wells updating form with all the features requested
			M	Storing and validating updated well data
E6	Session 6 - Inventory Dashboard	1	M	Offline mode for the application works as expected
			M	Proper design of inventory dashboard form with all the features requested
			M	The report on EM Spending by department is created according to the requirements

			M	The report on monthly most-used parts t is created according to i	
			M	The report on monthly costly assets t is created according to instr	
			M	The pie chart on departmental spending is drawn correctly	
			M	The stacked column chart requested is displayed correctly	
			M	Proper design of inventory control form with all the features requ	
			M	Correct parts allocation according to instructions	
			M	Correct operation for the assignment	
			M	Language file works as instructed	
Sub Criterion ID	Sub Criterion Name or Description	Day of Marking	Aspect Type M = Meas J = Judg	Aspect - Description	Judg Score
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Business

Classification			
	WSSS Marks	Aspect Marks	Variation
	10.00	9.00	1.00
	5.00	5.00	0.00
	10.00	10.00	0.00
	25.00	25.00	0.00
	50.00	51.00	1.00
Total Variation			2.00

	Mark
	9.00
	5.00
	10.00
	25.00

		51.00
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Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.5 if all the requests are not fulfilled Deduct 0.5 for each missing deliverable		1		2.00
Deduct 0.5 if all the requests are not fulfilled Deduct 0.25 for each missing deliverable		1		1.00
Deduct 0.5 if all the requests are not fulfilled Deduct 0.5 for each missing deliverable		1		2.00
Deduct 0.25 for each missing deliverable		1		1.00
Deduct 0.5 if all the requests are not fulfilled Deduct 0.5 for each missing deliverable		1		2.00
Deduct 0.5 if all the requests are not fulfilled Deduct 0.25 for each missing deliverable		1		1.00

Criterion A Total Mark 9.00

Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.5 if all the requests are not fulfilled		2		0.50
Deduct 0.25 if all the requests are not fulfilled Deduct 0.25 if the comments are not usable/readable		2		0.50
Deduct 0.25 for each missing item		2		0.50
Deduct 0.5 for no attempts Deduct 0.25 for attempts not showing understanding up to 0.25 in total for <3 not understood		2		0.50
Deduct 0.2 for each missing deliverable		2		0.50
Deduct 0.25 for each missing deliverable Deduct 0.25 if the comments are not usable/readable		2		0.50
Deduct 0.3 for each missing element Deduct 0.2 for not using the proper controls		2		1.00
		2		1.00
Layout is not balanced, and does not apply sufficient spacing Layout is somewhat balanced and/or harmonious, and applies appropriate spacing Layout is balanced, harmonious, and includes spacing between elements Layout is very well balanced, harmonious, includes appropriate spacing				
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.1 if filtering by warranty dates does not work		3		0.30

Criterion B Total Mark 5.00

Criterion C Total Mark 10.00

Deduct 0.1 if Search toolbox does not work as expected Deduct 0.1 if filtering by department and asset group does Deduct 0.3 if asset SN does not correct value shows Deduct 0.2 if asset pictures does not work as expected Deduct 0.2 if asset SN does not correct value on transfer		3		0.50
Deduct 0.5 if the data does not represent the values Deduct 0.5 for the filters not working		3		1.00
Deduct 0.5 if the data does not represent the values		3		1.00
Deduct 0.1 for each error		3		2.00
Deduct 2 if a local database is not used in any forms Deduct 2 if data is not updated correctly or displayed wrong		3		2.00
Deduct 0.5 if the data into grid does not represent the values Deduct 0.5 if the data into pie or stackbar chart does not represent		3		1.00
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.5 for lack of understanding of the database Deduct 0.5 for lack of understanding of app structure Deduct 0.25 if there are controls missing Deduct 0.25 if navigation is not layed out correctly Deduct 0.5 if more than 50% variance to the instructions Deduct 1 if the data is not fetched from the provided remote c Deduct 1 if the data is not stored on the provided remote c		4		1.00
Deduct 0.5 for lack of understanding of the database Deduct 0.5 for lack of understanding of app structure Deduct 0.25 if there are controls missing Deduct 0.25 if when user do login user role navigation is n Deduct 1 if more than 50% deviance to the instructions		4		1.00

Criterion D Total Mark 25.00

Deduct 0.2 for every invalid construct	4	0.50
Deduct 0.5 for not showing the correct asset info		
Deduct 0.5 for each of add and edit not working properly	4	0.50
Deduct 0.3 if manager can use zero or negative number for		
Deduct 0.5 for not showing the correct asset info		
Deduct 1 for lack of understanding of the database	4	1.50
Deduct 1 if more than 50% deviance to the instructions		
Deduct 0.25 if navigation is not layed out correctly	4	1.50
Deduct 1 if more than 50% deviance to the instructions		
Deduct 0.25 if there are controls missing		
Deduct 1 for lack of understanding of app structure		
Deduct 0.25 if navigation is not layed out correctly		
Deduct 1 for lack of understanding of app structure	4	2.00
Deduct 0.25 if there are controls missing		
Deduct 0.25 if navigation is not layed out correctly		
Deduct 1 if more than 50% deviance to the instructions		
Deduct 0.5 If the batch number is not implemented correc	4	1.00
Deduct 0.5 If the warehouses can go negative at any stag	4	1.00
Deduct 0.5 for lack of understanding of the database	4	1.00
Deduct 0.5 for lack of understanding of app structure		
Deduct 0.25 if there are controls missing		
Deduct 0.25 if navigation is not layed out correctly		
Deduct 0.5 if more than 50% variance to the instructions		
Deduct 1 if the data is not fetched from the provided remo	4	2.00
Deduct 1 if the data is not stored on the provided remote d		
Deduct 1 for lack of understanding of app structure	4	2.00
Deduct 0.25 if there are controls missing		
Deduct 0.25 if navigation is not layed out correctly		
Deduct 2 if more than 50% deviance to the instructions		
	4	1.00
	4	1.00
Deduct 0.5 for each missing table	4	2.00
Deduct 0.1 for every missing filed		

Deduct 0.1 for invalid data types on fields Deduct 0.1 for every relationship missing Deduct 0.1 if the correct symbols are not used		4		1.50
Deduct 0.5 for each missing actor Deduct 0.2 for each missing use case Deduct 0.2 for each missing system Deduct 0.2 for each missing package		4		1.50
The proper shapes are no used, relations and association Functionalities and requirements are represented, relation Functionalities and requirements are represented, relation Everything is up to the industry standard with all functional		4		1.00
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Deduct 0.2 for wrong or no use of proper fonts Deduct 0.2 for not using the correct colors Deduct 0.3 for overall consistent look and feel Deduct 0.3 for each missing fields of the asset not display Deduct 0.2 for each missing control or button Deduct 0.2 for each misuse of control or wrong population Deduct 0.5 if the search box does not work as described Deduct 0.5 if the department and asset gorup filter do not Deduct 0.5 if the warranty dates do not work as described Deduct 0.2 for each missing fields does not contain in the. Deduct 0.5 if the list does not filter when rotate from portra Deduct 0.5 if show extra icon or filter except edit icon on la Deduct 0.5 if the edit icon not found in page on landscape Deduct 0.1 for every field not save on the database Deduct 0.2 if location drop-down not related with departme Deduct 0.2 if system allow to add asset name the same na Deduct 0.5 if user can't upload one or more pictures into d Deduct 0.5 if user can't show the uploaded picture.		5		1.00
		5		2.00
		5		1.50
		5		0.50
		5		2.00

Criterion E Total Mark 51.00

Deduct 0.5 if user can't upload a picture in editing mode			
Deduct 0.5 if user can modify location,department or asset			
Deduct 0.5 if user can modify location,department or asset	5		1.50
Deduct 0.25 if list of destination departments are contain r			
Deduct 0.5 if user change department the new asset SN is			
Deduct 0.25 if the asset SN does not used the previously a			
Deduct 0.5 if the list does not contain all the fields	5		1.50
Deduct 0.5 missing conditional backgrounds for records			
Deduct 0.2 if list not sorted as described			
Deduct 0.1 for wrong or no use of proper fonts	5		0.30
Deduct 0.1 for not using the correct colors			
Deduct 0.2 for overall consistent look and feel			
Deduct 0.1 for if system does not login correctly	5		0.20
Deduct 0.1 for each missing control on the form			
Deduct 0.1 if missing conditional background for records	5		0.50
Deduct 0.2 for each missing field on grid list			
Deduct 0.5 for each missing field	5		1.00
Deduct 0.2 if required field validation does not function pro			
Deduct 0.5 if user can register new EM request when ther			
Deduct 0.5 for each missing field on grid list	5		1.00
Deduct 0.5 if the sorting criteria is not functioning as intenc			
Deduct 0.2 if any of the buttons do not work as instructed			
Deduct 0.2 for each field missing	5		2.00
Deduct 0.3 if start EM date can be set before the registrati			
Deduct 0.7 if check effective life of part does not work			
Deduct 0.2 if manager can edit EM request when complet			
Deduct 0.2 if manager could not proceed without adding p			
Deduct 0.2 if manager can not remove part from list			
Deduct 0.2 for wrong or no use of proper fonts	5		0.50
Deduct 0.2 for not using the correct colors			
Deduct 0.3 for overall consistent look and feel			
Deduct 0.2 for each missing field in list.	5		2.00
Deduct 0.2 for each incorrectly filled out combo box			
Deduct 0.3 if list not sorted as described			
Deduct 0.3 if PM task done is not correctly working (check			
Deduct 0.3 for each missing color association not working			
Deduct 0.5 if active date does not work properly	5		1.70

Deduct 0.5 for not applying each filter on list as described		
Deduct 0.2 if clear filter does not work.		
Deduct 0.2 for each missing field in form	5	1.80
Deduct 0.5 for each missing parameter related to schedule		
Deduct 0.2 for any input field not present on the form		
Deduct 0.2 if required field validation does not function properly		
Deduct 0.2 if not able to remove asset from list		
Deduct 0.2 if not able to add more than one asset		
Deduct 0.5 if the dates are missing	5	1.00
Deduct 0.5 if any field is missing		
Deduct 0.5 if the dates are missing	5	1.00
Deduct 0.5 if any field is missing		
Deduct 0.5 if the dates are missing	5	1.00
Deduct 0.5 if any field is missing		
Deduct 0.5 if the milage is missing	5	1.00
Deduct 0.5 no check against vehicle milage		
Deduct 0.2 for each missing control or heading on the form	5	1.00
Deduct 0.2 for each control not working as intended		
Deduct 0.3 for the initial sorting order not applied	5	1.00
Deduct 0.2 for each header not working as described		
Deduct 0.2 for each misproper display of icons besides the		
Deduct 0.3 for each missing field	5	0.50
Deduct 0.2 for each misproper colors used in display of fields		
Deduct 0.2 if action buttons don't work as described	5	1.00
Deduct 0.5 if validation on the inventory number is not checked		
Deduct 0.3 if validation does not display a proper message		
Deduct 0.1 for each missing control or heading on the form	5	0.50
Deduct 0.1 for each control not working as intended		
Deduct 0.5 if batch number pairing is not working as instructed	5	1.00
Deduct 0.3 if action button doesn't work		
Deduct 0.3 if the add button doesn't work		
Deduct 0.5 if the warehouse inventory is not checked as instructed		
Deduct 0.3 if data retrieval upon editing does not work as intended	5	0.50
Deduct 0.5 if submitting the form does not work as instructed		
Deduct 0.1 for each missing control or heading on the form	5	0.50
Deduct 0.1 for each control not working as intended		
Deduct 0.5 if batch number pairing is not working as instructed	5	1.00
Deduct 0.3 if batch number is not populated properly based on		

Deduct 0.3 if the add button doesn't work as expected			
Deduct 0.5 if the warehouse inventory is not checked as in			
Deduct 0.3 if data retrieval upon editing does not work as	5		0.50
Deduct 0.5 if submitting the form does not work as instruc			
Deduct 0.1 for each missing control or heading on the form	5		0.50
Deduct 0.1 for each control not working as intended			
Deduct 0.5 if any of the types chosen do not work as instru	5		1.00
Deduct 0.5 if view batch numbers does not work as instruc			
Deduct 0.2 for wrong or no use of proper fonts	5		0.50
Deduct 0.2 for not using the correct colors			
Deduct 0.3 for overall consistent look and feel			
Deduct 0.1 for each one missing control	5		0.50
Deduct 0.2 if the controls are misplaced or the spacing is			
Deduct 0.2 if the starts and endings are not correct	5		0.70
Deduct 0.2 if the labels are not present or clear			
Deduct 0.2 if the colors are not drawn correctly			
Deduct 0.1 for each one missing control	5		0.60
Deduct 0.2 if the controls are misplaced or the spacing is			
Deduct 0.5 if the starts and endings are not validated befo	5		1.00
Deduct 0.2 if duplicate names and layers are not checked			
Deduct 0.2 if the action buttons do not work as instructed			
Deduct 0.1 for each one missing control	5		0.70
Deduct 0.2 if the controls are misplaced or the spacing is			
Deduct 0.5 if the starts and endings are not validated befo	5		1.00
Deduct 0.2 if well name and deph of gas or oil extraction is			
Deduct 0.2 if well name and layer names are not checked			
Deduct 0.2 if the action buttons do not work as instructed			
Deduct 1 if offline mode works as expected and the prope	5		2.00
Deduct 0.5 if the restrictions are not met in offline mode a			
Deduct 0.8 if data sync between the server and application			
Deduct 0.2 if date of last update from server not present o			
Deduct 0.2 for each one missing control	5		0.50
Deduct 0.2 if the controls are misplaced or the spacing is			
Deduct 0.3 if all the requested months are not present as	5		1.00
Deduct 0.2 for each of the departments or their totals miss			
Deduct 0.3 if the caluculations are not correct			
Deduct 0.2 if the colors are not shown according to instruc			

Deduct 0.3 if all the requested months are not present as		5		1.00
Deduct 0.8 if the highest cost item(s) are not displayed co				
Deduct 0.8 if the most number item(s) are not displayed co				
Deduct 0.3 if all the requested months are not present as		5		1.30
Deduct 1 if the highest costing asset(s) are not displayed o				
Deduct 0.3 if the correct department names are not showr		5		0.70
Deduct 0.5 if all the requested data has not been shown o				
Deduct 0.3 if labels and colors are not used as instructed		5		1.80
Deduct 0.8 if all the requested months are not present as				
Deduct 0.3 if labels and colors are not used as instructed				
Deduct 0.8 if departments are not displayed as instructed				
Deduct 0.1 for each one missing control		5		0.70
Deduct 0.2 for each wrong type or incorrectly populated co				
Deduct 0.2 if the controls are misplaced or the spacing is				
Deduct 0.8 if the allocation method works incorrectly		5		1.00
Deduct 0.3 if warehouse inventories are not checked for a				
Deduct 0.2 if the requiried information for the parts are not				
Deduct 0.1 for each one missing field required		5		1.00
Deduct 0.5 if the assign button does not work as instructed				
Deduct 0.3 if the remove button does not work as instructe				
Deduct 1 not being able to select seats correctly as descri				
Deduct 0.5 if format not identified correctly or data not retr		5		1.00
Deduct 0.5 if the file(s) are not located or does not show th				

Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark	Criterion F	Total Mark	0.00
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark	Criterion G	Total Mark	0.00

Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark
Extra Aspect Description (Meas or Judg) OR Judgement Score Description (Judg only)	Requirement (Measurement Only)	WSSS Section	Calculation Row (Export only)	Max Mark

Criterion H Total Mark 0.00

Criterion I Total Mark 0.00

Competition Total Mark 100.00