

304CEM Grading Rubric for Front-end (35%)						
	0	1	2	3	4	5
Responsive 5%	No responsive design	An attempt for a responsive design but it is not working properly	Around half of the pages are responsive, or there are all responsive with major issues in each page	Most of the pages are responsive, with very few major issue with design such as wrong placement of large components	Fully responsive design, with minor issues, such as wrong placement of some small elements or extra shifts in some components	Fully responsive design UI
CSS 5%	No CSS used at all	Most of the CSS are working from the template. No real modification or use of its customised CSS	Half of the website is based on the original and customised CSS which heavily dependent on the template CSS	Most of the pages used original CSS, with major components throughout the pages used the template CSS	Well designed and original CSS, with some elements used from the template	Well designed, original CSS creation, completely different from the standard template
Front-end code Architecture 5%	No architecture	An attempt for a front-end code architecture was made, but it is not working properly, or it is mostly incomplete	Code architecture is not complete, with major flaws in some pages	Generally good architecture that needs improving in some places.	Good architecture with some minor flow in the design of the code	Clear architecture, clear separation of JS, CSS and contents
Front-end Coding (HTML & JS) 10%	No code supplied through Github	An attempt has been made to write code to implement some of the basic functionality although this may not be successful. No attempt at documentation.	Working code base showing the application of basic programming principles. Code may contain linting errors and warnings.	Demonstration of the usage of modularity to organise the code. Code contains linting warnings but no errors.	The code is modular. Code contains no linting errors or warnings with minor errors in the code	Code contains no linting errors or warnings.
Completeness 5%	Zero achievement	At attempt has been made to create front-end for the requested API, however they still need major work and improvements	Have of the back-end services have been utilised in the front-end	Most of the requested backend APIs were used in the front-end, with some having minor or major issue	Most of the requested back-end APIs have front-end pages ready to serve them	All requested backend APIs have been utilised in the front-end
Connecting to APIs 5%	No connecting to APIs from the front-end	An attempt for connecting and retrieving data from the APIs was done but it is mostly having issues in connecting	half of the pages connecting and retrieving data from the APIs with few having minor or major issues in connecting	Most of the pages connecting and retrieving data from the APIs with few having minor or major issues in connecting	All pages connecting and retrieving data from the API with few having minor or major issues in connecting	All pages connecting and retrieving data from the API

304CEM Grading Rubric for Backend API (35%)						
	0	1	2	3	4	5
API Design 10%	No API demonstrated in the screencast	An attempt has been made to implement a basic API however this does not work as expected	Simple functional API demonstrating a basic understanding of REST principles (resources, collections, methods and headers)	The API is fully functional and includes an authentication mechanism. The API demonstrates a good understanding of REST principles.	The API demonstrates user registration and authentication. It provides feedback for invalid requests through appropriate response codes and messages.	Fully REST-compliant API that includes filtering and sorting and conditional GET requests. It makes use of the full range of request and response headers.
Architecture 5%	No code supplied through Github	An attempt to write the API however it fails to work correctly.	All code for routing and business logic maintained in a single file	Code split into several files but overlap between routing and business logic.	Clear separation between routing and business logic code.	Clear separation between routing and business logic code with no code duplication.
Coding 10%	No code supplied through Github	An attempt has been made to write code to implement some of the basic functionality although this may not be successful. No attempt at documentation.	Working code base showing the application of basic programming principles. Code may contain linting errors and warnings. No attempt at code documentation	Demonstration of the usage of modularity to organise the code. Code documentation is incomplete. Code contains linting warnings but no errors.	The code is modular and includes full exceptionhandling. Code is fully annotated and explained. Code contains no linting errors or warnings and is fully documented.	The API demonstrates a wide range of appropriate language constructs including clear modular structure. Code contains no linting errors or warnings and is fully documented.
Completeness 5%	No APIs were developed at all, or all of the created APIs are not working	Only few of the requested APIs were created, the existing APIs may lack functionality	Half of the requested APIs were created and working properly, the existing APIs may not work or lack functionality	Most of the requested APIs were created, the existing APIs may not work or lack functionality	All requested API were created, with some of them may not working or lack functionality	All requested APIs were created and all working correctly
3 rd party API 5%	No 3 rd party API call	An attempt to call other API but fail to display the result	Success to call one to two 3 rd party API and cannot display the result properly	Success to call one to two 3 rd party API and can display the result properly	Rich (more than two) 3 rd party API call and related to the web content but the results cannot be displayed properly	Rich 3 rd party API call related to web content and all results properly display

304CEM Grading Rubric for Persistent Storage (20%)						
	0	1	2	3	4	5
Persistent Storage Design 10%	No Persistent storage at all	An attempt has been made a persistent storage however it is not working or lacking most of the functionality	Persistent storage working, however there is major work needed to improve the design.	A working persistent storage design with some major issues	Well-designed persistent storage with few minor improvements needed to improved efficiency	Well design and fully functional persistent storage
CURD operations 10%	Hardcode data / no SQL operations	An attempt to use SQL statement but cannot produce correct results	Operations are correct but cannot interact with front end	Proper SQL statements to interact with database however the results cannot properly display in front end	Proper SQL statements to interact with database with inappropriate data type and can display partial data.	Proficiency using proper SQL statement with supporting data type to carry data e.g. JSON/Array and display correctly in front end

304CEM Grading Rubric for Video or Live Application (10%)			
	0	1	2
Video 10%	No video submitted	A video was submitted in youtube or multimedia platform. However, the video has no narration or not present by the students. Or cannot demonstrate all the functionality of the website	A video was submitted in youtube or multimedia platform with student clear narration to present the works with fully demonstrating the functionality of the web site

