

NEA Checklist

System Analysis (Requirements):

Read the task, consider the project and identify the essential requirements.

Give each requirement a number and list them in a table such as shown below.

| Number | Requirement |
|--------|-------------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |

Design

This checklist only forms part of your possible design process, you may need to cover Networking, SQL, or complex User Interfaces. The boxes below form a guide of the minimum requirements that you must complete.

Decomposition

| Task | Tick |
|---|------|
| I have decomposed the problem into smaller problems that can become subroutines | |
| I have identified how all the requirements are covered in the smaller problems | |

Process

| Task | Tick |
|---|------|
| I have drawn a flowchart or written pseudocode or structured English for each subroutine I have identified how all the requirements are covered in flowcharts, pseudocode or structured English | |

Variables

| Task | Tick |
|---|------|
| I have identified the names to be used for all variables in each subroutine | |
| I have identified the names to be used for all global variables | |
| I have explained why any global variables are needed | |
| I have identified the data type to be used for each variable | |
| I have given a reason (purpose) for each variable that will be used | |

Parameters

| Task | Tick |
|---|------|
| I have identified the parameters that will be passed into each subroutine | |

Return values

| Task | Tick |
|---|------|
| I have identified any values that will be returned by functions | |

Files

| Task | Tick |
|---|------|
| I have identified the filenames to be used for each file (if necessary) | |
| I have identified the structure to be used for each file (if necessary) | |

Screens

| Task | Tick |
|--|------|
| I have designed a layout for each screen or included a screenshot of each screen | |

Tick when you have covered each requirement for each design task (some may not be appropriate so just put a cross in its place)

| Requirement | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------|---|---|---|---|---|---|---|---|---|----|
| Decomposition | | | | | | | | | | |
| Process | | | | | | | | | | |
| Variables | | | | | | | | | | |

| Requirement | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------|---|---|---|---|---|---|---|---|---|----|
| Parameters | | | | | | | | | | |
| Return values | | | | | | | | | | |
| Files | | | | | | | | | | |
| Screens | | | | | | | | | | |

Development

Code

Task

I have included a full code listing in my report
 I have used meaningful identifier names (1-3 marks)
 I have used appropriate indentation (1-3 marks)
 I have commented my code to explain what each part does (1-3 marks)
 I have used constants appropriately where needed (4-6 marks)
 I have used a consistent style throughout my code (4-6 marks)
 I have used subroutines (modularisation) within my code (7-9 marks)
 I have made appropriate use of local variables within subroutines (7-9 marks)
 I have only used global variables if necessary (7-9 marks)
 I have used validation wherever the user is expected to input data (7-9 marks)
 I have used exception handling to avoid program errors (10-12 marks)
 My code is self-documenting because sensible variable names have always been used and comments have always been used
 I have used interfaces (passing parameters) for subroutines (13-15 marks)
 My subroutines perform one function each (cohesive) and are reused where appropriate (13-15 marks)

Tick when you have covered each requirement, identified in section 1, within the code

| Requirement | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------|---|---|---|---|---|---|---|---|---|----|
| Coded | | | | | | | | | | |
| Commented | | | | | | | | | | |
| Evidenced | | | | | | | | | | |

Testing

Test plan

Task

I have included a test number for every test

Tick

| Task | Tick |
|--|------|
| I have included a description for every test | |
| I have included actual input data for every test | |
| It is clear to a 3 rd party tester where to input the data and what data to input | |
| I have included actual data for the expected results | |
| It is clear to a 3 rd party tester what they should expect the output data to be and where to find it | |
| I have covered all requirements in the test plan | |
| I have covered a reasonable sample of routes throughout the program | |
| I have checked the publicly available mark scheme to see what types of tests I should be carrying out | |
| I have used tests that are designed to find problems in my code | |

Testing

| Task | Tick |
|--|------|
| I have run each test | |
| I have shown evidence for each group of tests | |
| My evidence includes input and output data | |
| I have identified any failed tests (you should try to make sure you have at least one) | |
| I have explained why any tests have failed | |
| I have explained how I have corrected my code for any failed tests | |
| I have re-run any failed tests | |
| I have shown evidence for re-running any failed tests | |

Tick when you have covered each requirement during testing, showing screenshots of the test.

| Requirement | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------------|---|---|---|---|---|---|---|---|---|----|
| Test plan | | | | | | | | | | |
| Tested | | | | | | | | | | |
| Evidenced | | | | | | | | | | |
| Failed tests | | | | | | | | | | |
| Errors corrected | | | | | | | | | | |

Evaluation

Evaluation against requirements

| Task | Tick |
|--|------|
| I have explained how each requirement was met in my solution | |
| I have explained how my code is efficient | |

| Task | Tick |
|---|------|
| I have explained the reasons why I chose to write my code in an efficient way | |
| I have explained how my code avoids program errors using validation and exception handling | |
| I have explained the reasons why I chose to use the validation and exception techniques that I used | |
| I have described potential improvements that could be made | |
| I have explained how potential improvements could be achieved | |

Tick when you have evaluated each requirement

| Requirement | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------|---|---|---|---|---|---|---|---|---|----|
| Evaluated | | | | | | | | | | |