# Fundamental Test Process & Test Levels and Types

# Homework

1. Fill in the right term.

2. C a s e s

3. P l a n

4. O r a c l e

1. H a r n e s s

5. S t r a t e g y

7. I n t e n s I t y

6. S u I t e

1. Test …… is a collection of software and test data.
2. There are logical and concrete test …….
3. The results from the planning activities should be documented in a test…….
4. To predict the test results you use test …..
5. The main task of planning is to define test…..
6. You group the test cases in a test …..
7. The quantity of tests and the test coverage determine the test ….
8. Write down the test levels in correspondence with their level. Start with the basic test level at the bottom of the pyramid.

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| --- | --- |
| Letter | Test Level |
| A | **Acceptance Testing** |
| B | **System Testing** |
| C | **Integration Testing** |
| D | **Component Testing** |

1. Below we have some tasks for the testers in a department of a company. According to the activity described in the left column determine the type of the test they are going to perform.

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| --- | --- |
| * Test Activity | * Test Type |
| * Open the main menu, go to Invoices and create new Invoice. Check if the invoice is visible in menu Invoice Journal. | * Functional Testing |
| * Open the application and try logging in with invalid credentials. This test is going to be performed after each daily build. | * Regression Testing (Test automation) |
| * Create a test for logging in the application with legal credentials. Create a test to find how many users can log in simultaneously in the system. | * Non-Functional Testing (Load testing) |
| * Make the same test that revealed a bug before the last build. The developer set the issue to “fixed”. | * Regression Testing (Re-testing) |
| * Create a unit test for the method AddItem of the class Order. | * Structural Testing (Unit testing) |
| * Open the test used before the last release for exercising the online help option and change the link to the current location of the help info. | * Maintenance Testing |

1. Write test cases for a car. You need to cover the different levels and types. Try to achieve a good test coverage.

* Open the bonnet, identify where you would check the engine oil level and tell me how you would check that the engine has enough oil.
* Identify the dipstick, pull it out and check the oil level against the min/max markings.
* Show me/explain how you would check that the power assisted steering is working before starting a journey.
* If the steering becomes heavy the steering may be faulty. Before starting a journey two simple checks can be made.
  + Gentle pressure on the steering wheel, maintained whilst the engine is started, should result in slight but noticeable movement as the system begins to operate.
  + Turning the steering wheel after just moving off will give an immediate indication that the power assisted steering is functioning correctly.
* Open the bonnet, identify where you would check the engine coolant level and tell me how you would check the engine has the correct level.
* Identify the engine coolant tank and check the min/max markings. If the coolant is below the min mark then more coolant will need to be added. To do this, unscrew the cap and pour in coolant until the max mark is reached.
* Show me how you would check the parking brake for excessive wear; make sure you keep safe control of the vehicle.
* Apply the parking brake firmly. Demonstrate by applying parking brake so that when it is fully applied it secures itself, and is not at the end of the working travel.
* Open the bonnet, identify where the brake fluid reservoir is and tell me how you would check that you have a safe level of hydraulic brake fluid.
* Identify the brake fluid reservoir and check the fluid level against the min/max levels.
* Show me how you would check that the direction indicators are working correctly.
* Activate the indicators or hazard warning lights and walk around the car to see if all the indicators are working correctly.
* Show me how you would check that the brake lights are working on this car. (I can assist you, if you need to switch the ignition on, please don't start the engine).
* Operate brake pedal, make use of reflections in windows, garage doors, etc, or ask someone to help. (may need to switch ignition on, prompt not to start engine)
* Show me how you would clean the windscreen using the windscreen washer and wipers.
* Operate control to wash and wipe windscreen (turn ignition on if necessary.
* Show me how you would set the demister controls to clear all the windows effectively, this should include both front and rear screens.
* Set all relevant controls including; fan, temperature, air direction / source and heated screen to clear windscreen and windows. Engine does not have to be started for this demonstration.
* Show me how you would switch on the rear fog light(s) and explain when you would use it/them. (No need to exit vehicle).
* Operate switch (turn on dipped headlights and ignition if necessary). Check warning light is on. Explain use.
* Show me how you switch your headlight from dipped to main beam and explain how you would know the main beam is on whilst inside the car.
* Operate switch (with ignition or engine on if necessary), check with main beam warning light
* Open the bonnet, identify where the Windscreen Washer reservoir is and tell me how you check the level?
* Identify reservoir, lift off cap and make a visual check of level as there are no external markings on reservoir.
* Tell me how you would check that the brakes are working before starting a journey.
* As you move off check the brakes. They should not feel spongy and the car should not pull to one side.
* Tell me how you would check that the headlights and tail lights are working.
* Turn on lights (turn ignition if necessary), walk around car and check that the lights are on.
* Tell me where you would find the information for the recommended tyre pressures for this car and how tyre pressures should be checked.
* Information will be found using the car manufacturer's manual. Check the tyre pressures by using a reliable pressure gauge when the tyres are cold. Don't forget the spare and remember to refit the valve caps.
* Tell me how you would check the tyres to show that they have sufficient tread depth and that their general condition is safe to use on the road. A. A safe tyre will have no cuts or bulges. The tread depth should be at least 1.6mm across the central 3/4s of the breadth of the tyre and around the entire outer circumference.
* Tell me how you make sure your head restraint is correctly adjusted so it provides the best protection in the event of a crash.
* The head restraint should be adjusted so the rigid part of the head restraint is at least as high as the eye or top of the ears, and as close to the back of the head as is comfortable. N.B. Some restraints might not be adjustable.
* Tell me how you would know if there was a problem with your anti lock braking system.
* Warning light should illuminate if there is a fault with the anti lock braking system.