# Fundamental Test Process & Test Levels and Types

# Homework

1. Fill in the right term.

2. Cases

3. Plan

4. Oracle

1. Harness

5. Schedule

7. Implementation

6. Suite

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.

|  |  |
| --- | --- |
| 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.

|  |  |
| --- | --- |
| * 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. | * Nonfunctional testing – security test |
| * 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. | * Nonfunctional testing – load test |
| * Make the same test that revealed a bug before the last build. The developer set the issue to “fixed”. | * Re-testing |
| * Create a unit test for the method AddItem of the class Order. | * Structural testing – component test |
| * 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.

* Check the outside of the car for the color and scratches
* Check the engine
* Check if the doors can be locked/unlocked and opened/closed
* Check the car interior – seats, belts, mirrors, floor console, door panels, carpet, roof, center console (buttons and dials for turning on lights, ventilation and other functions), steering wheel, pedals, shift lever for changing gears, hand brake
* Check the luggage space
* Check if the windows can be opened/closed
* Check the tires
* Check if the lights work – headlights, brake lights, turning lights, reverse lights
* Check the car weight
* Check if there are: battery, fuel, oil, brakes liquid, antifreeze
* Check if the engine starts
* Check if the gears work correctly
* Check if the breaks work correctly
* Check if speed and rpm indicators work correctly
* Check the time needed for the car to accelerate and reach 100 km/h
* Check if the maximal speed could be reached
* Check the fuel and oil consumption
* Check the temperature of the engine
* Check the car behavior when the maximal number of passengers is present
* Check the safety (crashworthy) and driver assistance systems
* Check the gas emissions