

# Hospital Administrative Application Testing Plan Document

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## IDENTIFICATION INFORMATION SECTION

### PRODUCT

- **Product Name:** Hospital Administrative Application

### PROJECT DESCRIPTION

Track hospitals Intensive Care Units beds and ventilators occupancy in a given district. And show small statistics about them to the Health district manager

### TEST PERSONNEL

Name	ID
Fadi Alahmad Alomar	120180049
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### PROGRAMMERS

- Ahmed Salman
- Menna tullah
- Omar Alaa
- Omar bahaa

## UNIT TEST SECTION

Testing modules against known input to see if they output what is expected from them and in the way it was intended by the programmer.

### UNIT TEST STRATEGY AND EXTENT OF UNIT TESTING

Testing **Stats** module to see if it performs the way expected. Methods tested include:

- **test\_average\_used\_vents**
- **test\_average\_used\_beds**
- **test\_percentage\_vents**
- **test\_percentage\_beds**
- **test\_check\_occupancy**

The file **StatsUnitTesting.py** is attached along this documentation and should be placed in the main root directory before being run.

Unfortunately, There were some dependencies between files and hardcoded variables (database file path) that rendered individual unit testing almost impossible to implement. Aside from that, only the **test\_average\_used\_beds** methods showed unexpected behavior probably due to a different interpretation on the programmer's side.

## OUTSIDE VIEW TEST SECTION

Testing the entire software from the point of view of the user and the SOFTWARE REQUIREMENTS for it

### OUTSIDE VIEW TEST STRATEGY AND EXTENT OF OUTSIDE VIEW TESTING

Only test the outer view and the results.

### OUTSIDE VIEW TEST CASES

#	OBJECTIVE	EXPECTED RESULTS
1	Test the software from the Hospital Manager point of view with the right data format entered	Success message
2	Test the software from the Hospital Manager point of view with the wrong data format entered	Fail\Try again message
3	Test the software from the Hospital Manager point of view with the empty fields	Fail\Try again message

#	OBJECTIVE	EXPECTED RESULTS
4	Test the software from the District Manager point of view without a warning	UI showing the right stats of the hospitals
5	Test the software from the District Manager point of view with a warning	UI showing the right stats of the hospitals and a warning message about reaching a cortical state in the numbers of beds or ventilators

**TEST CASE 1**

step #	DETAILS	INPUT	EXPECTED RESULTS	AS EXPECTED (T/F)
1	Run the command <code>python hospital_system -u manager</code>	NONE	GUI showing fields to enter all the needed input	T
2	Input the data each in its right place with the right format	Hospital ID = 1, # of Beds = 99, # of Ventilators = 90, # max bed = 40, #max Ventilators = 40, Date = 2021-04-16	Window showing the process has been done successfully	T

**TEST CASE 2**

step #	DETAILS	INPUT	EXPECTED RESULTS	AS EXPECTED (T/F)
1	Run the command <code>python hospital_system -u manager</code>	NONE	GUI showing fields to enter all the needed input	T
2	Input the data each in its right place with the right format	Hospital ID = 3.3, # of Beds = 99, # of Ventilators = 5.5, # max bed = T, #max Ventilators = 6000, Date = 2021-06-11	Window showing there was an error in the entered data	F

**TEST CASE 3**

step #	DETAILS	INPUT	EXPECTED RESULTS	AS EXPECTED (T/F)
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step #	DETAILS	INPUT	EXPECTED RESULTS	AS EXPECTED (T/F)
1	Run the command <code>python hospital_system -u manager</code>	NONE	GUI showing fields to enter all the needed input	T
2	Input the data each in its right place with the right format	NONE	Window showing there was an empty field in the entered data	T

**TEST CASE 4**

step #	DETAILS	INPUT	EXPECTED RESULTS	AS EXPECTED (T/F)
1	Run the command <code>python hospital_system -u manager</code>	NONE	GUI showing fields to enter all the needed input	T
2	Input the data each in its right place with the right format	Hospital ID = 1, # of Beds = 99, # of Ventilators = 90, # max bed = 40, #max Ventilators = 40, Date = 2021-06-10	Window showing the process has been done successfully	T
3	Run the command <code>python hospital_system -u official</code>	NONE	GUI showing Summary of the hospitals statistics without a capacity warning	T

**TEST CASE 5**

step #	DETAILS	INPUT	EXPECTED RESULTS	AS EXPECTED (T/F)
1	Run the command <code>python hospital_system -u manager</code>	NONE	GUI showing fields to enter all the needed input	T
2	Input the data each in its right place with the right format	Hospital ID = 1, # of Beds = 90, # of Ventilators = 90, # max bed = 90, #max Ventilators = 90, Date = 2021-06-10	Window showing the process has been done successfully	T

step #	DETAILS	INPUT	EXPECTED RESULTS	AS EXPECTED (T/F)
3	Run the command <code>python hospital_system -u official</code>	NONE	GUI showing Summary of the hospitals statistics with a capacity warning	T

OUTSIDE OVERALL SCORE

Test case #	PASS/FAIL
1	PASS
2	FAIL
3	PASS
4	PASS
5	PASS