**GM assignment – Task 2, Omer Ofir**

System Description: (Assumes)

* All the CCTV cameras have IP address, all the cameras are connected to the same VLan.
* The cameras are connected to DVR (digital video recorder), Wi-Fi or Ethernet cable.
* The system has a web browser and mobile application (user interface).
* The system should identify the cameras automatically (if they are connected to the same VLan).

**High level test cases:**

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| **Test’s number** | **Test’s name** | **Starting conditions** | **Action** | **Expected results** | **Actual results** |
| 1 | Camera’s connection | Visit the URL and verify there are no cameras connected to the interface. | Add camera to the interface (repeat this stage for 10 cameras). | The URL should update and show the new devices. |  |
| 2 | Disconnecting camera | Connect 10 cameras to the interface and open the URL. | Disconnect the cameras one by one. | The cameras should disconnect in order. |  |
| 3 | Camera video streaming | Connect 10 cameras, visit the URL and verify all the cameras displays on the screen. | Press each one of the cameras icons to open the live stream. | The live camera stream will display on full screen. |  |
| 4 | Privacy check | Visit the URL and verify only your company’s cameras are available. | Try to connect to another network. | No available another network (other cameras are not found). |  |
| 5 | Capability | Connect one camera,  visit the URL and verify there is one camera connected.  Connect 5 different devices to the interface  (Pc, mobile, tablet, etc..) and select the same camera. | Add another device (sixth device) and select the same camera. | The URL should show a message: “There are too many users connected”. |  |
| 6 | Chuck size | Connect one camera,  visit the URL and verify there is one camera connected. | Change the “Chunk-size” at the device’s settings (1,4,12,24 hours). | “Chunk-size” should be changed according to the settings  (1,4,12,24 hours). |  |
| 7 | Storage- recorded videos. | Connect one camera,  visit the URL and verify there is one camera connected. | Define the limit number of the recorded videos (a week, a month, and a year back). | The number of the recorded videos is as defined. |  |
| 8 | Turn on/off camera | Connect one camera,  visit the URL and verify there is one camera connected. | Turn off/on the camera from the user interface. | The camera should be turned off/on. |  |
| 9 | Latency test | Connect one camera, visit the URL and select the camera.  Split the browser and open stopwatch, aim the camera at the screen and start the stopwatch (stop after a few seconds). | Open the video’s storage and select the current time.  Stop the video at a couple of points. | The time’s delta should be less than 300 msec. |  |
| 10 | Camera’s resolutions | Connect one camera, visit the URL and select the camera. | Take one picture from the camera and check the picture resolution. | The resolution should be at least:  1280 x 720 |  |

* **Note**: Repeat all the tests using the mobile app.