

# OMNIDJ

## FUNCTIONALITY REPORT

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### OVERVIEW

Number of participants: 4 + Jetson

Number of streaming sessions: 3

- The tests performed today were focused on basic functionality, UI interface and OmniDJ's graphs and stats.
- The following issues have been categorized based on Priority, with emphasis placed on the demo presentation for clients
  - **P1 – High Priority**, must have as soon as possible
  - **P2 – Medium Priority**, needs to be done
  - **P3 – Low Priority**, nice to have

### FUNCTIONALITY ISSUES

**#000 – P1 –** Artists are not able to sing together at the same time, as they have no means of syncing two or more different DJ streams

- Repro steps:
  - Two DJs join a room
  - DJ1 claps hands in a simple rhythm
  - DJ2 tries to clap his hands at the same time as DJ1
  - Transmission lag will make them clap out of sync
- Additional info: If we can fix this issue, the product becomes immensely more valuable

**#001 – P1 -** Jetson's memory overloads when it leaves the room, resulting in a Jetson crash

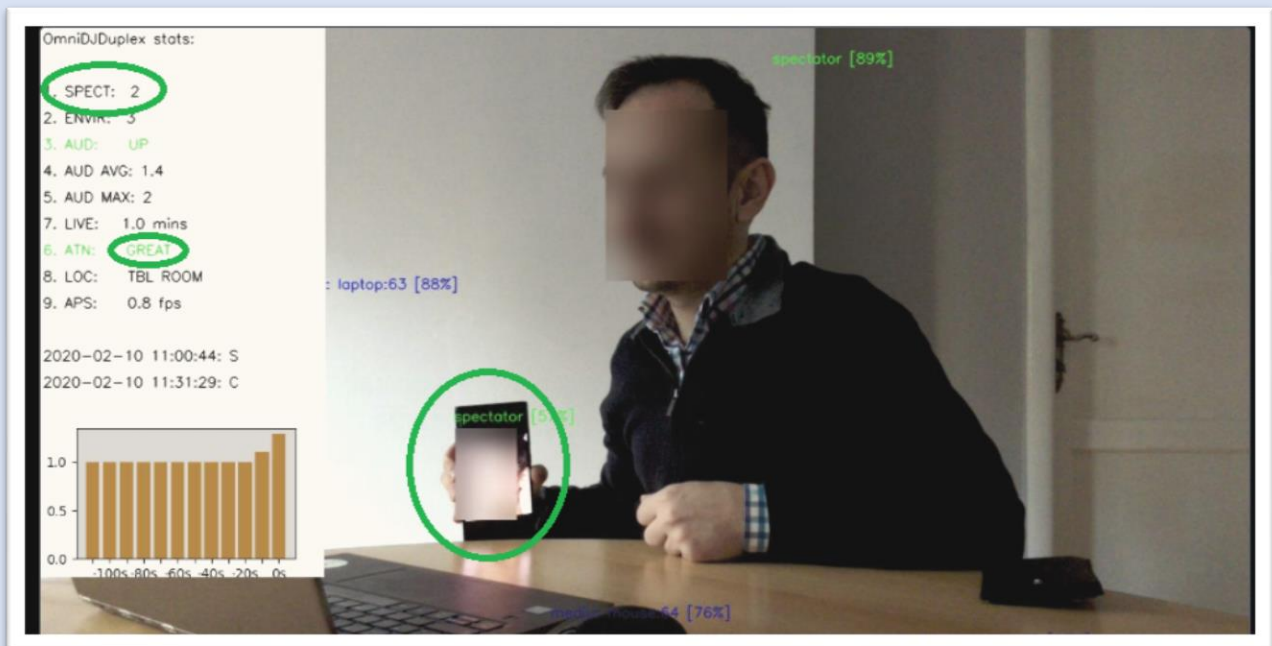
- Repro steps:
  - Join a room with the Jetson and start streaming
  - Wait for the Jetson memory to be almost full
  - Make the Jetson leave the room
- Additional info: this only occurred once during tests, needs more testing, but the memory overload seems to happen during each run of the Jetson

**#002 – P1** - Jetson cannot be used to see the DJs perform as it cannot handle the streaming flow, thus forcing the HoReCa client to use a secondary device (and secondary viewer account)

- Repro steps:
  - Join a room with the Jetson and start streaming
  - Observe that the DJ streams are very slow and choppy
- Additional info: the client has to use another laptop and a second viewer account in order to show to his customers the DJ stream – the Jetson can't handle it by itself

**#003 – P1** - Jetson detects photos of faces as full body persons and it falsely changes to stats accordingly, including “attention” and “audience”

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - Hold up a photo or a mobile phone with a picture of a face on it
  - Move the picture/phone close to the table surface to hide the fact that it doesn't have a full body
- Additional info: It is incredibly easy to trick the Jetson into thinking that is a human



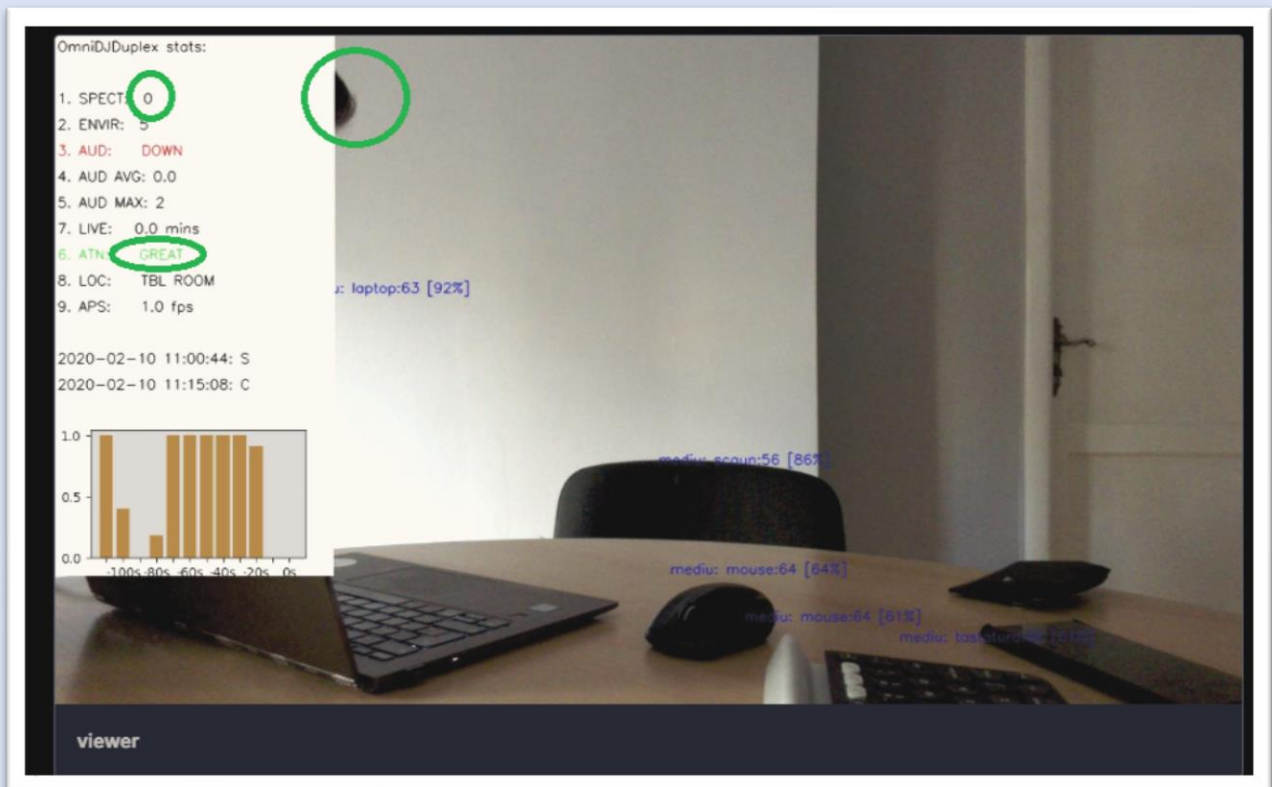
#004 – P1 - Jetson presents a negative impact on the “attention” stat if it cannot see the person’s face but it can detect the person’s body

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - Ask a viewer from the Jetson stream to stand up so we can see his body, but his face goes out of the frame
- Additional info: The “attention” stats are taking a negative hit, even if the person always faces the Jetson.



### #005 – P1 - Jetson can detect the face without counting the person

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - Ask a participant from the Jetson stream to stand up, walk out of frame, then bend over to have only his head/face in the frame from the side
- Additional info: Apparently, the Jetson doesn't count "faces" as being people

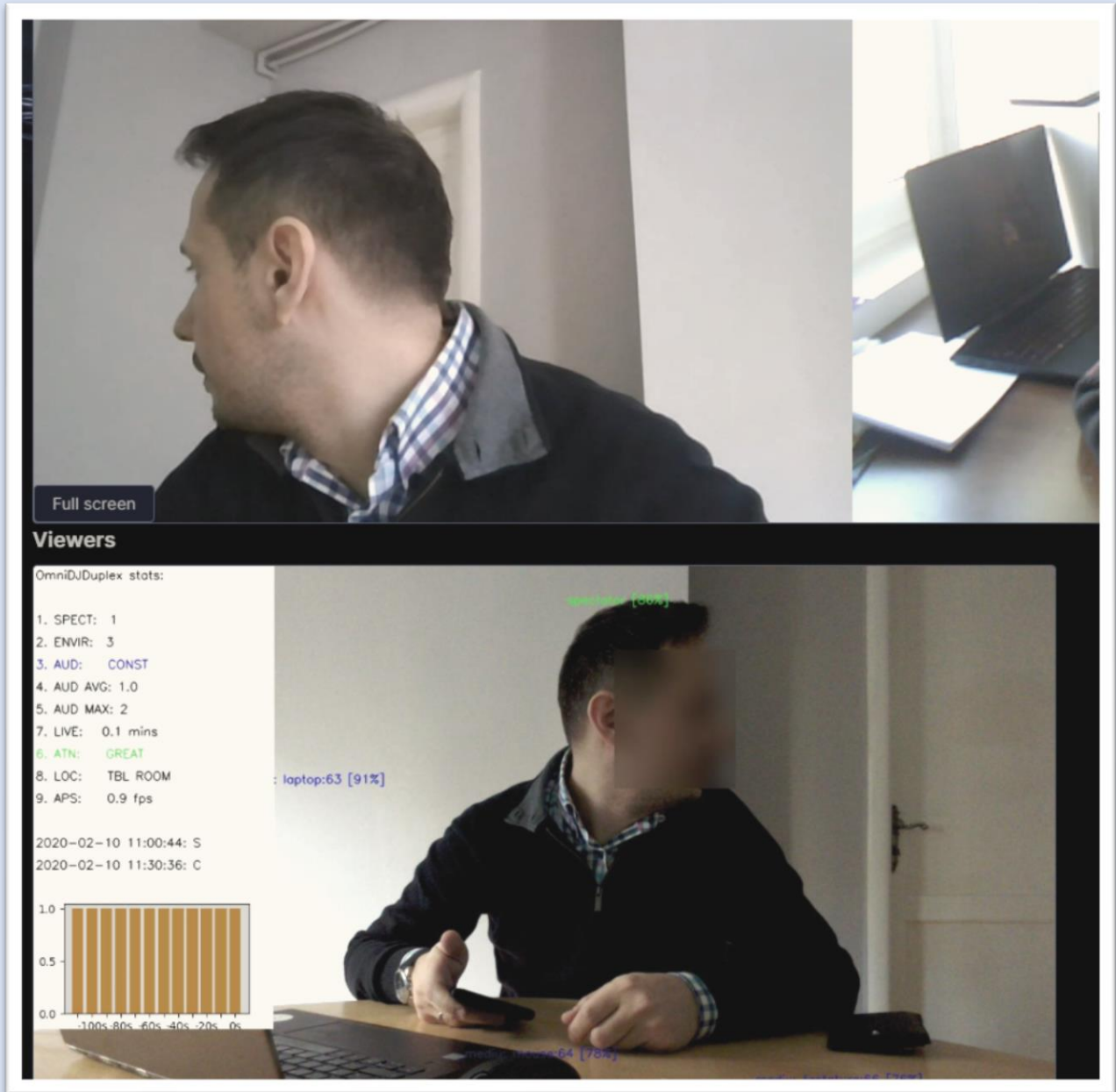


### #006 – P1 - Jetson's graphs and stats abbreviations are not intuitive enough for the average client

- Repro steps:
  - Hold a demo for OmniDJ
  - Present your data to people who may not even know how to send an email
  - Show words like ENVIR, AUD AVG, LIVE 1.1 mins, ATN, APS to a Romanian audience who may not be fluent English speakers
- Additional info: if people will want to play with the Jetson during demos, they must understand what they are looking at, in terms of graphs and stats

### #007 – P2 - Jetson's stream is mirrored / flipped

- Repro steps:
  - Connect with a secondary account on a laptop as a DJ to the same room with a Jetson, both being pointed at you
  - Notice how the laptop shows the right orientation of the image
- Additional info: Some DJs might find this to be important when it comes to public interactions

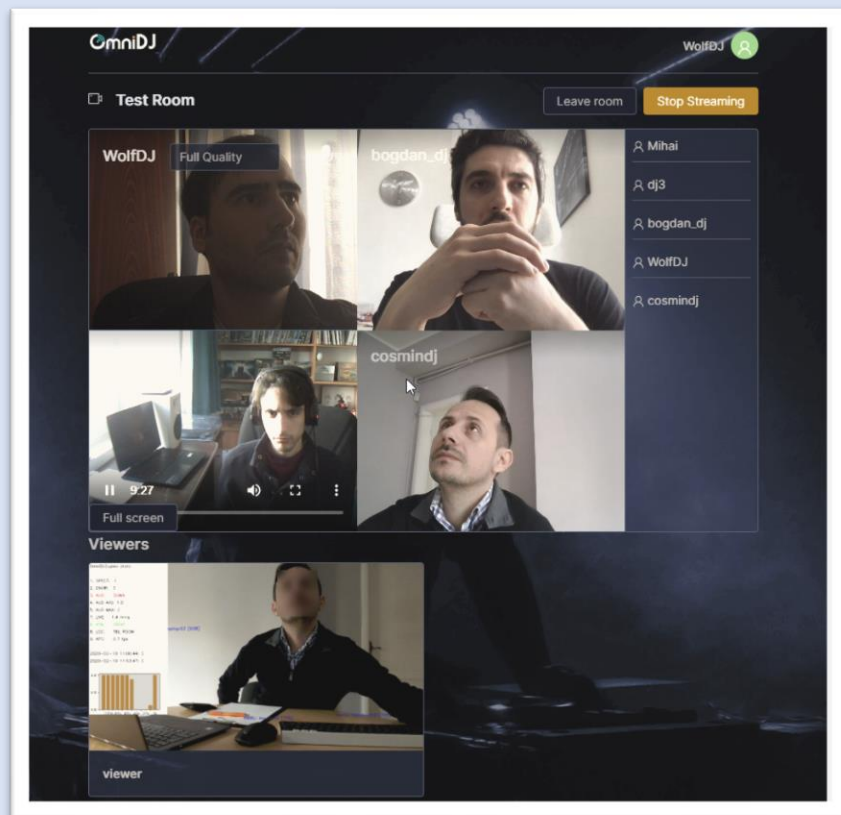


### #008 – P2 - Jetson doesn't have a fullscreen button in the UI

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - If you're a DJ, you may want to see a specific location fullscreen, or perhaps you are far away from the PC and you wish to see the stats bigger onscreen
  - There's no fullscreen button on the Jetson stream
- Additional info: The shortcut CTRL and + that enhances the size of the browser doesn't work either.

### #009 – P2 - DJs see themselves on top of the room, instead of seeing the Jetson stream first

- Repro steps:
  - Make a DJ account and join a room that already has a Jetson and other DJs streaming
  - Notice that you are shown your own stream on top, instead of the Jetson which is your main interest
- Additional info: The DJ order is given by first-come first-shown; it would be nice to allow a bit of mobility so the DJs can control the placement and hierarchy of streams. Example: the lead singer of a band who is late to the stream might not like to be placed at the bottom of the group of DJ streams.





#010 – P2 - Jetson's graphs and data need to be shown bigger and rearranged in an easier-to-understand form

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - As a DJ, it is very difficult to play your guitar away from the monitor and also see the stats for several locations – the text is small and you always have to look for the info you need.
- Additional info: Maybe use icons to depict attention and persons and the other stats?

#011 – P2 - When Jetson leaves room, the Jetson stream freezes and the image remains there

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - The Jetson leaves the room
  - After that, the Jetson stream freezes and it will never disappear
- Additional info: Re-entering the room with the Jetson will fix the issue and make it stream again, instead of having it frozen

#012 – P2 – In this current stage of development, starting and stopping the Jetson (and its stream) takes too long, is overly complicated and unintuitive for the average client

- Repro steps:
  - Hold a demo
  - Let's say the Jetson freezes and you must restart it
  - The client will have the impression that it is far too complex and difficult for him to understand how to start/stop the device
- Additional info: This will have to be polished in time, yet during demos we should not let people in the room before the Jetson is already running

#013 – P3 - The site doesn't have "Powered by Lummetry" anywhere to show who made OmniDJ and there is no legal info either

- Repro steps:
  - Go to the OmniDJ site and any of the rooms
  - Notice that there's no Lummetry logo anywhere
  - Notice that there is no legal info anywhere (Copyright by Lummetry, in association with European blabla)
- Additional info: This is a small issue, but the visual impact is great. Besides, if we do all the technical stuff now and arrange everything like that, how do we know the logo/legal stuff won't affect the visual balance of the page?

#014 – P3 - Viewers have no intuitive control or visible sliders over the volume of the DJ's stream

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - One performer's webcam/microphone is too loud and covers everyone else (and he doesn't notice)
  - Viewers don't see how they could adjust the volume to their liking
- Additional info: workaround is to right-click on the stream and choose to see all options, but we can't ask that of clients or viewers. A visible slider, alongside a mute on/off button is mandatory.

#015 – P3 - Username of the same person appears twice if he exits the room and then enters the same room again

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - Either as a DJ or a Viewer, press the "Leave Room" button
  - After you've left the room, join the same room again
  - Notice your username appears twice in the list on the right side
- Additional info: it can get confusing fast, showing an inaccurate number of people



#016 – P3 - There is no stream of a digital metronome in the room to help artists sync better

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - Have the artists try to play in sync using a metronome on a third-party site and notice it's not working
- Additional info: an OmniDJ metronome in the room, that is constantly streaming (and is also manually adjustable to the desired tempo) would work, theoretically, under ideal conditions.

#017 – P3 - Minimizing the browser window and sticking it to the side of the screen makes the entire page (including the scroll bar) pop in and out, flickering and disturbing the viewing experience

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - Minimize the browser window and drag it to the left side of the screen, to snap it to the edge, on Windows 10
  - Notice flickering every time you move the mouse over the streams
- Additional info: This is a very specific bug, that occurs only under these specific circumstances. However, it can disrupt the viewing pleasure significantly.

Video of issue #017 - <https://www.youtube.com/watch?v=gukgY64uyVo>

### #018 - P3 - Viewer is forced to scroll if there are at least 3 DJs playing in fullscreen

- Repro steps:
  - Have a regular streaming session (with Jetson + DJ streams)
  - Make the DJ streams fullscreen by pressing the OmniDJ UI Fullscreen button
  - Notice how DJs #3 and #4 are cut off, forcing the user to scroll down to see them
- Additional info: It feels odd as it is now.



## CONCLUSIONS

OmniDJ can be shown in a demo, with the following suggestions:

- Make it ultra-easy for the clients to understand the graphs and stats. Do not overestimate your audience's ability to understand (#006)
- Show it as two amazing sides of the same coin, with benefits for each side, working together (#009)
- Have everything running (DJs + Jetson streams) **before** client is in the room to see the demo. (#012)
- Suggestion: Go through the questions-document you have received on the "7" group on WhatsApp and review together the possible questions you may receive, alongside the answers you will give – so everyone is on the same page.