

# PROJECT SOLUTION & TASK ALLOCATION

## Proposed solution

The idea is to have the device connected to a computer, as thus, it will also use machine vision, to navigate through the vaginal canal as the health personal manoeuvres it. This will also help in avoiding in hurting the patient as they will now see exactly what is happening in clear vision. Now we will have two personnel working on these cells, the doctor and the device (after training with machine learning algorithms, we expect the device to be able to better detect potential cancerous cells). Eventually, the doctor will not have to spend time testing analyzing samples.

**Hardware solution** = **speculum** + **camera** {magnifying lenses} + **sample extraction system** {cervical mucus} + **biosensors** + **display**

**Software solution** = **computer vision** {cervical cancer prediction, HPV identification & classification and digital images} + **patient database system** {record personal information etc } + **being able to whatsapp and/or email the results to patients** + **real time remote diagnosis** {for collaboration of doctors}

**Overall solution** = **hardware** + **software**

Table 2: Task allocation for Project

Member	Task
Melo	<ul style="list-style-type: none"><li>• Computer Vision {Data Collection and Processing},</li><li>• Designs {Brainstorming and Material selection }</li></ul>
Kes	<ul style="list-style-type: none"><li>• Patient Programme System</li><li>• Hardware</li></ul> <p>{I don't know your full expertise, just guessing }</p>

<b>Mpho</b>	<ul style="list-style-type: none"> <li>• Business Model Canvas</li> <li>• Marketing</li> </ul> <p>{I don't know your full expertise, just guessing }</p>
<b>Boo*</b>	<ul style="list-style-type: none"> <li>• Computer Vision {Processing}</li> <li>• Designs</li> <li>• Hardware</li> </ul>

**Its not final!!!**

**Feel free to propose suggestions!!!**

**You know yourself better!!!**