**Read the research paper and make notes on the following**

1. **Title of Research Paper**: Virtual Doctor
2. **Research Problem:**

To create an, app based, intelligence system that offer diagnosis on user symptoms.

1. **Issues in Current technology/methods/techniques**

* There are system that offer diagnoses based on symptoms but they have limitations. There are many things that they cannot do like taking your blood pressure, blood sugar, etc. You cannot ask the system to take your blood tests or contact a doctor even if you think you really need to.
* The problem that we faced when presenting a self-diagnosis system to the general public was that a lot of people would present the system with symptoms that would not relate to certain illnesses, or be circumstantial to the day.

1. **Rationale and Benefits:**

The benefit of this system is that it resolves the issues that we were facing in the current technology.

* It will be able to take blood tests and after asking the patient about all their symptoms, it will provide them with most suitable results. After this, using the inbuilt technology, the system will be able to analyze whether the patient needs a doctor or not.
* If there seems to be a need, the system will connect the patient to the doctor using technologies like webcam.
* The system is developed in a way that it will help the people who have no or minimal knowledge of computers in getting their diagnoses.
* A user could potentially diagnose themselves with an illness which the system will suggest to them to see their doctor about.

1. **Method Used:**

The system has multiple methods and features applied which allow user to easily diagnose there symptoms.

The system is broken down into:

1. Intelligent System
   1. Since it is for people with all ages and with any level of education, it will be able to identify misspellings – This method is known as “Symptom search-Spelling”.
   2. It calculates the percentage of the symptoms input by the user, against the symptoms in a relating illness and find optimum result - This method is known as “Symptom search-Optimal results”
2. Graphical User Interfaces
   1. Front-end
   2. Back-end
3. Data Base
4. Testing Methods applied
   1. Visual User Testing
   2. Automated Unit Test Cases
   3. End User Testing
5. **Results and Conclusion**

The project does not only have potential commercial benefits, but is something that can benefit society as it was designed to provide a solution to a problem currently being experienced in the UK. The developers believe they have succeeded in developing a product that displays the skills that they gained over the years. The system aims to that contains human elements of intuition and common sense that could lead to replacing a professional physician which can help in overcoming the shortage of available doctors for patients, at the time of need.

1. **Recommendations for future researchers and policy makers:**

There are numerous ways of improving and extending the Virtual Doctor project.

* “Weighted Seat” to automatically input a user’s weight.
* Include a tool to measure your height, heart rate monitor, blood pressure measurer, digital pulse oximeter, thermometer, etc.
* Currently the system is not set up so that it will distinguish between female or male only illnesses; therefore a female user could have testicular cancer as result which is not desirable. The project could be extended by categorizing certain illnesses as male or female only.
* Calculating and graphing illnesses in various locations.
* Potential to have the frontend personalized to confirm to specific environments.