## INSTITUT TEKNOLOGI DAN BISNIS



## BINA SARANA GLOBAL

# SISTEM PAKAR DIAGNOSA COVID 19 OMICRON MENGGUNAKAN METODE FORWARD CHAINING BERBASIS WEB

#### INTRODUCTION

Since it was first announced, the first time there was in Indonesia, cases of COVID-19 increased many times over time so necessary attention. a new variant of Covid-19, namely variant B.1.1.529 named Omicron. This variant has at least 30 substitutions or amino acid changes, three deletions and one minor insertion. There is Changes to this variant will then affect the diagnostic test (target gene S), faster transmissibility and antibody neutralization which decreased. Through in silico research in the form of docking studies, changes in the receptor binding domain of the omicron variant cause increased affinity of SARS-CoV-2 for the human ACE2 receptor.

#### **OBJECTIVE**

- Designing and building an expert system to diagnose the Covid 19 variant of Omicron.
- Implementing the Forward Chaining method into an expert system for diagnosing the Covid 19 variant of Omicron

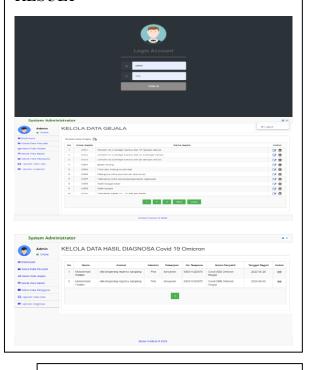
#### **SCOPE**

- 1. The created system only diagnoses omicron.
- 2. The system only diagnoses the initial symptoms of Omicron and the diagnoses made by this system do not include lab and X-ray results.
- 3. The system only diagnoses omicron based on cases that often occur, namely the degree of mild, moderate and severe omicron cases
- 4. The system created only uses the forward chaining method

### **METHODOLOGY**

- Method of observation (observation), is a way of collecting datas directly to the field through observation of the object of study of a number of the individuals concerned.
- Interviews (interviews), conducted through a debriefing process with one or several speakers at a place or location where the object of research is done.
- 3. Literature method (library research), is used to get information from some of the existing literature and through the resources of the library related to good governance documents, summarizes the data as a reference and cite the author.

#### RESULT



#### **CONCLUSION**

The application of this expert system can help the public to know the early symptoms of omicron and diagnose the initial symptoms of omicron and can provide the best solution for the diagnosis in accordance with the knowledge of specialist doctors.



NIM : 1119110006

Name : Muhammad Fadilah Faculty : Information and

: Information and Communication

Technology

Program of Study: Informatics

Engineering