

**DEPARTAMENTO DE CIENCIAS DE LA COMPUTACIÓN**

OBJECT ORIENTED PROGRAMMING

23217

**HOMEWORK:**

DEFINING PROJECT

**MEMBERS:**

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**GROUP’S NAME:** Edi-son’s

**PROJECT’S NAME:** War Game

**Problem**

A system is needed to address the automation challenges encountered during the joint exercise known as "War Game." Difficulties in assigning roles and resources, as well as an inefficient ability to monitor progress and report events, were also identified.

**Overview**

The "War Game" simulates emergency situations (such as floods, earthquakes, war situations, etc.). Its objective is to evaluate the response capacity of a military group and measure the effectiveness of its procedures and personnel. They must act according to established protocols, notify scheduled events within a defined timeframe, and cooperate with other state entities, such as the National Police or the Risk Management Secretariat.

**Background**

**1**. Emergency Situation Simulation

Emergency simulations, such as the "War Game," are planned exercises that allow government, military, and civilian institutions to prepare for potential natural or human-made threats. These simulations replicate scenarios such as earthquakes, floods, armed conflicts, or attacks, and seek to evaluate the response capacity of the actors involved. According to international organizations such as the UN and the Red Cross, simulation exercises are key to strengthening inter-institutional coordination and improving real-time response protocols.

**2**. Process Automation in Emergency Management

Automation in crisis management contexts reduces human error, allocates resources more efficiently, and facilitates decision-making. With our code, it's possible to perform tasks such as role assignment, activity monitoring, and real-time event logging. This is especially useful in "War Games," where multiple entities are involved and every second counts. The use of specialized software improves the traceability of actions and allows for the issuance of detailed reports at the end of the exercise.

**3**. Information Systems for Security and Defense

Information systems for national defense and security are developed under criteria of accuracy, confidentiality, interoperability, and high availability. In simulations such as the "War Game," these systems must integrate with platforms from entities such as the National Police, the Armed Forces, or the Secretariat of Risk Management. An appropriate software architecture can ensure that alerts, reports, and decisions flow in a structured and efficient manner among the stakeholders involved.

**4**. Importance of monitoring and reporting

In simulated and real-life scenarios, constant monitoring of actions and proper event recording are essential elements for evaluating institutional performance. An automated system can record each reported event, time its response, and generate final reports that identify strengths and weaknesses in the procedures followed by staff.

**Analyst Comparison**

The expected outcome of the project is the development and implementation of a system for managing the “War Game”. The system will allow for efficient assignment of roles and resources, reducing the likelihood of human error. It will also systematically record and report events, improve coordination among the highest authorities responsible for receiving information, and strengthen emergency response capacity.