**E-Healthcare and Drug Enhancement System**

**Domain:** HealthCare

**Description:** HealthCare is one of the most rapidly evolving industry and the fact that it is related to human health and well-being makes it extremely crucial field for development. Newer systems are implemented each day to make the process of treatment easier and convenient. However, we didn’t come across an online portable system which could aggregate two important features of drug enhancement and patient’s recovery. So in this project we aim to solve the above mentioned problem using an ecosystem model.

**Scope:** We aim to create a multi enterprise model consisting of the following enterprises.

1. **Drug Enhancement and Manufacturing enterprise**

* This enterprise would consist of organizations like procurement organization, drug enhancement organization, drug testing organization, mass production organization.
* It would provide functionalities like procuring chemical compounds, manufacturing drug prototypes, performing clinical trials of subjects, mass producing the drug ONLY if it is cleared safe and effective.
* It would also have analytics system which would generate drug specific reports which would provide quality information regarding the effectiveness of drug based on testing as well as real time usage.
* It would also compare drugs on the basis of a data set procured from hospitals and pharmacies to extract information such as “Which drug is better at treating jaundice?”, “Which drug has the least side effects?” etc.

1. **Hospital enterprise**

* This enterprise would consist of organizations like doctor’s organization, pathology organization, local pharmacy organization, end user interaction organization, medical staff organization.
* It would thus provide functionalities like appointments for the patients, reviewing medical history of patient, providing appropriate medical treatment to the patient.
* It would also implement a “first of its kind” e- prescription system which would not only allow the patient to procure medicines directly from pharmacy on the basis of his medical history but also enable doctor to review patient history which would be available globally.
* It would provide the data set that would be passed on to the drug manufacturing enterprise to perform analysis to gain qualitative information regarding drugs usage and generate trends and reports based on their factors like their effectiveness, side effects, cost etc.

**Conclusion:**  This system would help eventually to develop drugs which would be highly effective, with reduced side effects, lower production costs. It would also aid the patient to have access to proper medical treatment anywhere globally.