

A PROJECT ABOUT EMERGENCY MEDICINE AND DOCTOR SERVICES

Motivation: People who are from remote areas are deprived from proper treatment facilities. For this reason they need to go to Dhaka city for getting better treatment, which are so much painful and also expensive. One the other hand, during emergency situation its became very pathetic for them to collect necessary medicines. Using technology and internet this system will be helpful to get proper treatment and get to collect necessary medicines.

Objective: The goal of the project is to provide proper medicine and medical services through online for remote area.

Critical Challenges: Working with the medicine company and doctors will be a critical challenges.

Conflicting requirements: Without seeing the patient, prescribe a prescription can be risky for doctors. That is why they will hesitate to work. Thus, managing the doctors will be one of the most critical challenges.

No healthcare services for 5 years in Bagarchar UP

Jamalpur Correspondent daily-bangladesh.com

Published: 04:08 PM, 8 November 2020 Updated: 04:10 PM, 8 November 2020



Figure : Bagarchar UP Health Center

-Various problems forced the Bagarchar UP Health Center to shut its services for more than five years at Bakashiganj Upazila in Jamalpur. As a result, the local patients have to go to the 12-kilometer-away government and private hospitals of the Upazila and district.

Source : <https://www.daily-bangladesh.com/english/No-healthcare-services-for-5-years-in-Bagarchar-UP/53100> - 04:10 PM, 8 November 2020

Complex Engineering Problem Addressing

Some components of Complex Engineering Problem:

Knowledge Profile (K)
K1 – natural sciences
K2 – mathematics
K3 – engineering fundamentals
K4 – specialist knowledge
K5 – engineering design
K6 – engineering practice
K7 – comprehension
K8 – research literature

Attribute	P1 and some or all of P2 to P7:
Depth of knowledge required	P1: one or more of K3, K4, K5, K6 or K8
Range of conflicting requirements	P2: wide-ranging or conflicting technical, engineering and other issues
Depth of analysis required	P3: no obvious solution
Familiarity of issues	P4: Involve infrequently encountered issues
Extent of applicable codes	P5: outside problems encompassed by standards and codes of practice
Extent of stake-holder involvement and conflicting requirements	P6: diverse groups of stakeholders with widely varying needs
Interdependence	P7: many component parts or sub-problems

Let's explore how a few P's could be addressed through this project:

P1 (Depth of knowledge required- one or more of K3, K4, K5, K6 or K8): This project generally requires a study of similar work with the same purpose as ours (K8 – Research Literature), Design the program for system(k5 - engineering design), We must need some medicine knowledge, and medical knowledge (K4 – Specialist Knowledge), Developing an App for this project (K6 – Engineering Practice).

P2 (Range of conflicting requirements): Data Analysis with proper regularization, while limited real data is available, will be create a Conflict for this project.

P6 (Extent of stake-holder involvement and conflicting requirements- diverse groups of stakeholders with widely varying needs): Various groups of stakeholders also medicine stores can be benefited from this project.

Complex Engineering Problem Addressing

P7 (Interdependence- many component parts or sub-problems): This project involves three subsystems mainly:

1. Application model.

List of activities (As):

Attribute	Some or all of the following:
Range of resources	A1: use of diverse resources (include people, money, equipment, materials, information and technologies)
Level of interaction	A2: resolution of significant problems arising from interactions between wide-ranging or conflicting technical, engineering or other issues
Innovation	A3: creative use of engineering principles and research based knowledge in novel ways
Consequences for society and the environment	A4: consequences in a range of contexts, characterized by difficulty of prediction and mitigation
Familiarity	A5: Can extend beyond previous experiences by applying principles-based approaches

Let's explore how a few A's could be addressed through this project:

Attribute	Some or all of the following
Range of resources	A1 (Range of resources): This plan will require the collaboration of various organizations including people (survey), finance (consideration of project creation), information and technology.
Level of interaction	A2 (Level of interaction): A good level of interaction with the doctors, pharmacists and the faculty members of pharmacy departments is very important.
Familiarity	A5 (Familiarity): Solving a medical-related problem will be a challenge for CSE students.