APPLICATION ENGINEERING

AND

DEVELOPMENT

FINAL PROJECT

MENTAL HEALTH CARE SYSTEM

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INTRODUCTION:

Mental disorders affect nearly 20 percent of American adults; nearly 4 percent are severely impaired and classified as having serious mental illness. These disorders are often associated with chronic physical illnesses such as heart disease and diabetes. They also increase the risk of physical injury and death through accidents, violence, and suicide. There is no single cause for mental illness, several factors can contribute to risk for mental illness.

OBJECTIVE:

The aim of this project is to conduct a rapid synthesis of the evidence on the clinical effectiveness and cost-effectiveness of models for providing treatment and support for people experiencing mental health crisis based on their answers regarding mental health questions.

The project addressed four main objectives regarding the evaluation of models of care at each of the four stages of the mental health crisis

 i. access to support before crisis point

 ii. urgent and emergency access to crisis care by support

 iii. quality of treatment and care given by doctors

 iv. promoting recovery/preventing future crises of patient by NGO

GOALS:

Convenience: Treatment can take place anytime and anywhere and may be ideal for those who have trouble with in-person appointments.

Anonymity: Clients can seek treatment options without involving other people.

Service to more people: This application can help mental health providers offer treatment to people in remote areas or to many people in times of sudden need.

Consistency: this application can offer the same treatment program to multiple users.

Support: Application can complement traditional therapy by extending an in-person session, reinforcing new skills, and providing support and monitoring by NGO and Hospital

Regulation: The question of who will or should regulate mental health technology and the data it generates needs to be answered.

BACKGROUND RESEARCH:

We found out that mental illness can take many forms and not everyone comes forward with it. We concluded to build an application where people can easily access to this platform and help can be provided to those in need.

The imperative to increase healthcare access, efficiency and effectiveness is nearly impossible to meet without reliance on technology. The existing application of mental health is scattered. We aim to develop an application where people actually in need of therapy, but they cannot take the place of engaging with someone. While applications that claim users have benefited from their support, but If we don't have data from a controlled trial, it is reckless as it means we don't know the harm. We tried of making a better system with data and personal information.

APPLICATION OVERVIEW:

Based on simple questions it can test for Diagnose Mental Health Disorders and then give information about the treatment options i.e. Doctors, Psychotherapy and then also offers Interactive Disorder specific events. If you experience symptoms of depression and anxiety like sadness, low self-esteem, brooding, fatigue or sleep problems, this is not uncommon. Mindspace is a mental health care app that helps you track, monitor, and understand your complaints in a structured manner and, perhaps, find out which negative behavior could relate to a worse well-being. At the end of the program, you will receive a detailed summary that you can also share with healthcare professionals, e.g. therapists, psychiatrists, or general physicians. During the screening period, you will find helpful information on psychology, signs of depression, therapy and mental health.
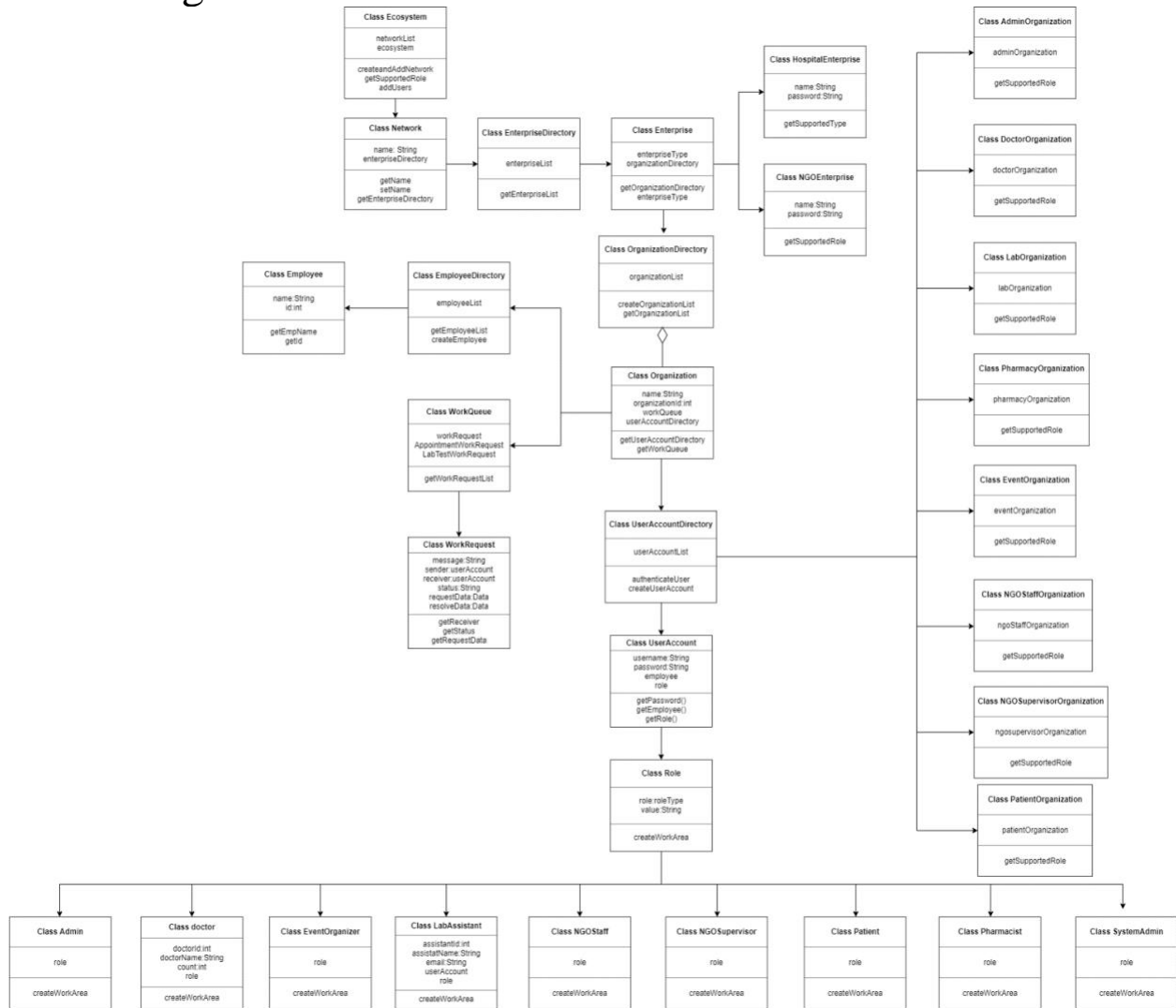
Assess your mental health

• Answer questions about your emotional and physical well-being
• Get a mental health assessment or prescribed medicines
• Share your assessment with therapists, psychologists, and other healthcare professionals

Architecture Diagram:
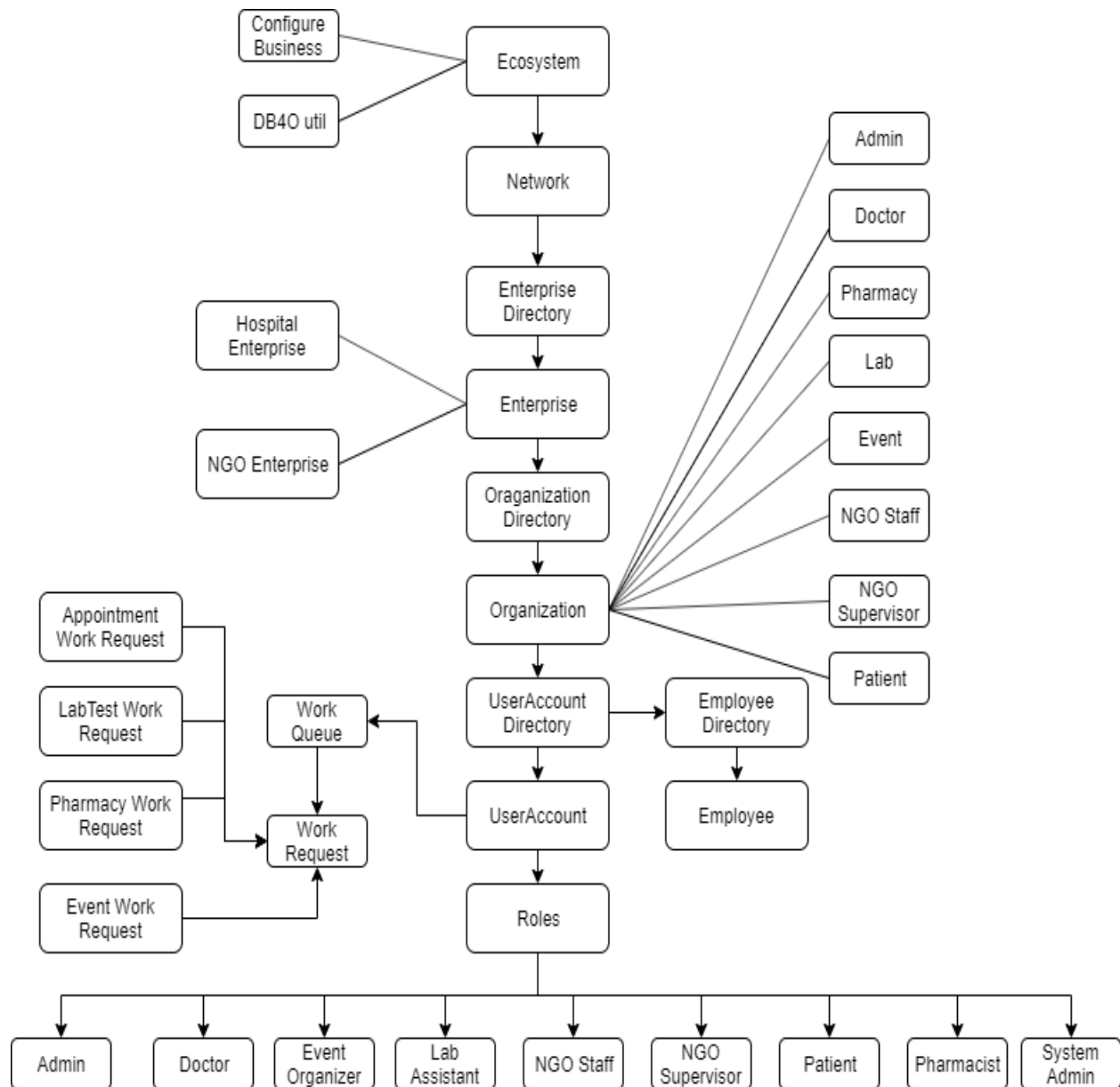
Class Diagram:

USE CASES:

Patient Domain:

- Have an option to sign-up
- Creates a profile and can view profile and dashboard
- Takes test based on suitable mental condition provided and gets recommendation based on test and score obtained
- Can directly book an appointment of a doctor
- Get prescription suggested by doctors and confirmed by pharmacist
- Register of events and seminar

Doctor Domain:

- Have an option to sign-up
- Checks Patient history and appointment schedule on dashboard
- Attending Patient and appointment confirmation/Declined
- Request Patient Test to Lab Assistant
- Prescribes medicines to Patient based on the test taken by Patient
- Sends request to Pharmacist for Patient medicines

Lab Assistant Domain:

- Have an option to sign-up
- Performs Test of Patient suggested by doctor
- Sends Test status to doctor

Pharmacist Domain:

- Have an option to sign-up
- Takes work assigned by doctor to himself.
- Process the prescribed medicines by doctor to patient for pick-up
- Changes the status of medicines ordered

NGO Supervisor Domain:

- Have an option to add new event details
- Send event details to NGO staff

NGO Staff Domain:

- Have an option to assign event to particular event organizer

NGO Event Organizer Domain:

- Gets all the details from NGO staff which needs to be organized

FUTURE SCOPE:

- Team plans to implement One-on-one Video/Audio Psychiatric Consultation with a Psychiatrist and One-on-one Video Psychotherapy sessions
- Location based services to the users
- Email confirmation for booking of events and Doctor appointment
- Diet and physical exercise suggested or recommended by doctors based on test

CONCLUSION:

- Our application is built for user who is suffering from mental health issues.
- Patient can take test based on its result we are giving the feedback what problem the patient has and severity of it.
- Patient is getting details about events organized by NGO and can attend these events.
- Patient is also getting list of doctors where the proper treatment will be provided.
- So, Mental Health Care System is providing everything needed for patients to understand their issue and get proper treatment.

REFERNCES:

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