# COSC-310-Group-6

Assignment for COSC 310 Group 6 Assignment 2

This project implements a therapy conversation agent.

The overarching class is the Conversation class. When we start a new conversation with a patient, we create a new Conversation object. The conversation class has an instance of a Patient, and an array called conversationTopic that has a predefined list of topics to discuss in a specific order: Greetings, SmallTalk, Discussion, Advice, and Goodbye. In the Discussion topic, we discuss Subjects including Emotions, Symptoms, Events, Status, or Habits. These subjects are linked to Solutions in a graph called the Context Graph.

The Context Graph has two sets of nodes: Subjects and Solutions. These nodes are represented in the Context Graph by two one-dimensional arrays, subjects and solutions. The edges are represented by an adjacency list: the arrays subjects and solutions store a linked list of the edges.

Conventions for UML diagram:

* Arrows from subclasses to superclasses (extends)
* Filled in diamonds attached to a line indicate composition (Conversation has a Patient)
* Abstract members italicized
* Static members underlined
* Final members all caps

Solution

Goodbye

Advice

Conversation

patient: Patient

conversationTopic: *Topic*[]

Patient

ContextGraph

TEMPLATE\_GRAPH: ContextGraph

subjects: Subject[Linked]

solutions: Solution[]

Edge

*Subject*

Status

Emotion

Symptom

Habit

Event

*Topic*

*startTopic*()

*endTopic*()

Discussion

patientGraph: ContextGraph

SmallTalk

Greetings