

SWE3053: Human Computer Interaction
Semester 1, 2022

Final Assignment: Prototyping

Deadline: 3 June 2022, 23:59

Objective: In this assignment, you will create a low-fidelity prototype based on a user's requirement document. You may submit hand-drawn prototype, or you may submit screen-shots created using computer program electronically. Your prototype should include:

1. Screen layout sketches of all the pages, illustrating the interaction mode of the portal;
2. All the interaction component defined in your interface; and
3. Navigation workflow between different screen layout sketches.

You should submit your final work on iCampus.

User Requirement Document

1. Purposes of the Interface

The client would like to develop a phone application for training medical or nursing students. Medical diagnoses typically employ decision trees for determining medical diseases or conditions based on a subject's symptom. The process involves asking the subject a series of simple questions thru medical interview (i.e. the process everybody went thru when we visited a clinic in the event of sickness). Figure 1 illustrates the decision tree for autistic disorder.

This phone application will take a collection of decision trees, display the diagnostic questions sequentially based on the decision tree, and then come up with a conclusion based on subject's answers.

The purpose of this phone application is for training medical and/or nursing students. Experienced doctors are usually familiar with these decision trees. However, medical and nursing students may not be familiar with them yet, and this phone application aims at assisting medical and nursing students in the learning process.

2. Architecture

2.1. The web portal is designed to be accessed by tablets or smartphones.

2.2. The targeted OSs are Android and its variants.

2.3. Users will be able to download and install the phone application through Google Play.

3. Users Profiles

- Age: 21 – 40
- Gender: Male or Female
- Education: University students in human medicine or nursing school
- Computer literacy: Normal computer usage (non-programmer). They are ready to learn new computer software system.

4. Working Environment

Typical office working setting (i.e. typical clinical office setting).

5. Taskflow

5.1. Managing Decision Tree Library

5.1.1. Importing Decision Trees

The user should be able to import a decision tree to the library of the phone application.

5.1.2. Deleting Decision Tree

The user should be able to delete a decision tree that is already imported in the library of the phone application.

5.2. Running Decision Trees

5.2.1. Selecting Decision Tree

The user can select the decision tree to be executed.

5.2.2. Executing the Selected Decision Tree

After the user select the decision tree to be executed, the phone application will display the questions in the decision tree in sequence. Sub-sequential questions will be displayed according to user's answer.

User also should have the capability of exiting an ongoing decision tree and going back to the decision tree selection screen.

6. Language

- English

The interface should be in English.

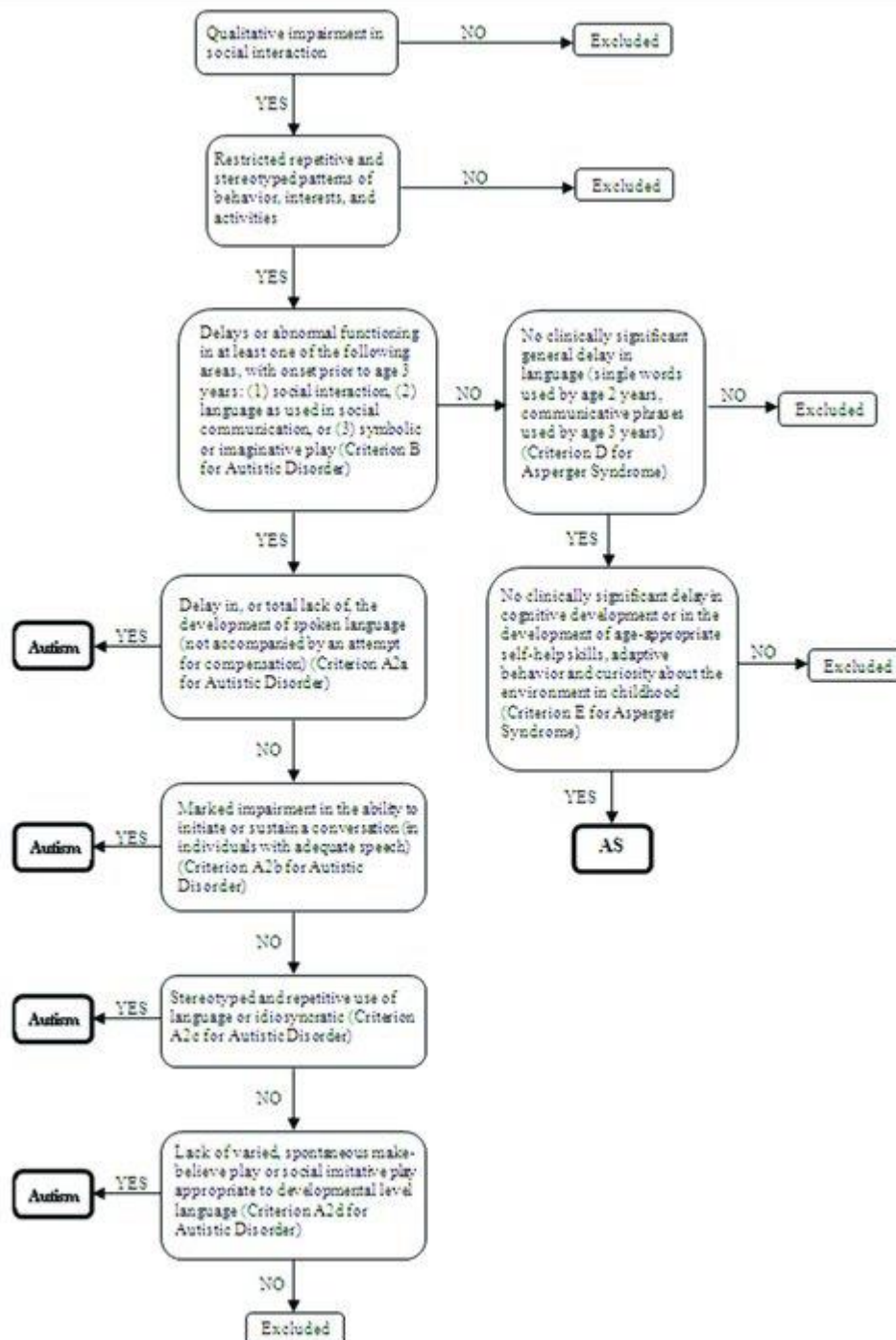


Figure 1. Decision tree for autistic disorder.