

transition time where student would be given a time to find their group for both expert and jigsaw session.

However, this system is mainly use for the time management of the individual. This means there is no grouping feature available to accommodate the jigsaw learning method.

2.4. Comparison

There are a few systems available that let users facilitate a grouping features and time management accordance with their preferences. However, there is a lack of features that would draw back lecturers and students to use the system to accommodate the jigsaw learning method. Table 2-1 shows is a comparison of the related system available.

Table 2-1: Comparison of related system

Aspects	JigsawBuddy	Team Picker Wheel	Pomodoro Time Management Concept	My application
Randomise students into a group according to number of students in classroom	✓	✓	X	✓
Randomise students with a preferences such as gender	X	✓	X	✓
Able to shuffle the list of students when distributing students into groups.	X	✓	X	✓
Timer to accommodate jigsaw learning session	✓	X	✓	✓
Customisable timer	X	X	✓	✓
Able to set short time between time intervals (expert and jigsaw session)	X	X	✓	✓

3. Requirement Analysis

According to (tutorialspoint, 2023) about software development life cycle, the first stage that the developer must complete is planning, which involves precisely defining the application's scope and goal. Developers continue to the requirement analysis phase after completing the planning phase. To determine what the application is supposed to do and its requirements, requirement analysis can be taken into consideration as part of the planning process.

3.1. Elicitation techniques

One of the elicitation techniques that has been made would be conducting an interview with a jigsaw expert where the expert was being ask about their experience when conducting jigsaw learning method in class and their opinion on using this method. There was a series of question that has been asked which separate into three categories: common, in-depth, and opinion. Other techniques that have been used would be handling out surveys. The reason of handing out surveys to students because it is necessary to seek validation and get some of their perspective when conducting jigsaw learning method in class.

3.1.1. Interview with Jigsaw Expert

(Kousa, 2022) is an associate professor in the Department of Electrical Engineering in King Fahd University of Petroleum and Minerals. He completed his PhD in Electrical Engineering from Imperial College, London in 1994. According to Kousa, he knew about jigsaw learning method when he asked his colleagues some