Gamification of IE 322

Overview
The problem was to gamify the content of the class IE 322 in an effort to engage and enhance the students understanding of the concepts being taught.

Objectives
The end goal was to create a game that helped students identify and differentiate between the types of discrete probability distributions. It also focused on the understanding and computation of Joint Probability distributions. Our specific objectives were to

- Propose suitable gaming elements based on analysis of course content and user/student performance.
- Develop a game using Visual Basic or any other appropriate package to gamify the proposed concepts in IE 322

Approach
- Met with Sponsors and adviser to narrow down the conceptual scope.
- Brainstormed creative themes and game content
- Tried to incorporate the gamification concept by having the users flip the coins themselves in an effort to make the game interactive.
- Used Visual Basic to code the game in stages.
- The game was tested with students currently taking IE 322 along with students that have already taken it previously. The students answered a survey on the game quality and ease. 84% agreed that the game was helpful.

Outcomes
The outcome is a fully functional game that helps student’s better grasp concepts of IE 322.
- Students that sampled the game found it helpful and easy to use
- The game code has room for modifications should the instructor decide to add any additional interfaces
- The game is built on conceptual understanding aided by tutorial based modules making the game playable without prior knowledge of the content.