CS4ZP6 Problem Statement
Ampersand Tarski Event-Condition-Action Rules

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Ampersand Tarski is a tool for requirement engineers, system designers and business users to simulate/prototype solutions to/for real world problems. Ampersand provides users with a dynamic mold that allows them to formulate percision in addressing problems through design. It allows users to construct an artificial world that operates based on user specified limitations.

Currently, Ampersand is live and readily accessible to the engineering community through github; it has the ability to access logical discrepancies on sets of data based on user specified limitations. Though it has the mechanism to manipulate data and generate prototypes, logical inconsistancies still arise in the data. These inconsistancies occur when the limitations imposed by the user changes and the data struggles to remodel itself to fit into its new world. Not all sets of data can easily remake itself to fit the restrictions imposed by the user, as a result there can be contradictions which violate one one or more of the restrictions. Data that violates the restrictions are dealt with in one of two ways: elimination or rehabilitation.

The purpose of this project focuses on the rehabilitation of data and the maintainance of the artificial world according to user defined limitations. Although Ampersand has the ability to recognize inconsistencies, it relies heavily on the user to manually fix inconsistencies. This project focuses on restoring a realistic representation of Ampersand's artificial world to be consistent with reality by automating the restoration of data. This is important to Ampersand as a whole because it automates repairs of inconsistent data which makes Ampersand less tedius for users and more efficient over all. Moreover, this project is important as it addresses a fundamental challenge all software engineers face, and that is how to faciliate and main an essence of reality in an artificial system that has no natural boundaries.