Glossary

- **User** - An actor representing a person using the website.
- **Member Account** - An account created by a User that allows them to create Lessons and save Problems for a longer period of time.
- **Expression Manipulator** - The page where the User is able to interact with an Expression Tree and work toward solving a Problem.
- **Expression Creator** - The page where the User is able to construct and manipulate Expression Trees, and create Problems.
- **Expression Manipulator Tutorial** - A Problem/Lesson that will help new users become accustomed to the UI by adding tips and tricks while the user solves the problem(s).
- **Expression Creator Tutorial** - A Problem/Lesson which walks the User through the expression creator UI.
- **Expression Tree -** An abstract data type which represents one of the manipulatable expressions.
- **History Bar** - A sidebar that shows the user the past Algebraic Actions that they took.
- **Problem** - A combination of an Expression Tree, representing a starting expression, and another Expression Tree, representing a goal expression. This would also include metadata including the url to the Problem, if one exists.
- **Lesson** - A set of Problems with an order that can be assembled by a User with a Member Account.
- **AI Solver** - An actor that uses a search algorithm to determine an optimal sequence of Algebraic Actions from a given Expression Tree to a goal Expression Tree.
- **Problem Generator** - An actor that, when requested, generates a random problem for a User.
- **Central Database** - Stores all Problems, Lessons, and Member Accounts so that other parts of the program can access them.
- **Algebraic Action** - An action chosen by the User that transforms an Expression Tree according to the algebraic rules defined on Expression Trees.