Vision Statement

- **Introduction to SymPy:**

  SymPy is an open-source Python library for symbolic computation. It provides computer algebra capabilities either as a standalone application, as a library to other applications, or live on the web. SymPy is simple to install and to inspect because it is written entirely in Python with few dependencies. This ease of access combined with a simple and extensible code base in a well known language make SymPy a computer algebra system with a relatively low barrier to entry. SymPy includes features ranging from basic symbolic arithmetic to calculus, algebra, discrete mathematics and quantum physics. It is capable of formatting the result of the computations as LaTeX code.

- **Elevator statement:**

  For mathematicians and programmers **who** need to compute Mathematical calculations on their applications or live on the web, **the** SymPy library is an open-source library in Python **that** allows users to compute many complicate mathematical calculations. **Unlike** other Python librarys for computing mathematical calculations such as NumPy and SciPy, our library deals with the computation of mathematical objects symbolically. This means that the mathematical objects are represented exactly, not approximately, and mathematical expressions with unevaluated variables are left in symbolic form.

- **Project goals:**

  Main goal:

  Contributing to the SymPy library by developing a new mathematic tool (or set of tools) and merging it with the existing library.

  A good example for an important mathematical tool can be an inequalities solver.

  Secondary goal:

  Experiencing with the workflow of a wide project with a large team. Getting to know experienced programmers from around the world.