

## 1.1 REQUIREMENTS & CONSTRAINTS

List all requirements for your project. Separate your requirements by type, which may include functional requirements (specification), resource requirements, physical requirements, aesthetic requirements, user experiential requirements, economic/market requirements, environmental requirements, UI requirements, and any others relevant to your project. When a requirement is also a quantitative constraint, either separate it into a list of constraints, or annotate at the end of requirement as “**(constraint)**.” Ensure your requirements are realistic, specific, reflective or in support of user needs, and comprehensive.

Functional Requirements	<ul style="list-style-type: none"><li>- End product must include annotation of source code.</li><li>- Automated annotation tool must correctly chunk and label sections of code.</li></ul>
Resource Requirements	<ul style="list-style-type: none"><li>- If we end up training a neural network, sufficient GPU power is needed to train large models and evaluate performance.</li></ul>
Aesthetic Requirements	N/A
User Experience Requirements	<ul style="list-style-type: none"><li>- Labels must be either clearly marked and understood or explained.</li></ul>
Economic Requirements	N/A
Environmental Requirements	N/A
UI Requirements	<ul style="list-style-type: none"><li>- Documentation on how to run various scripts must be provided.</li></ul>

## 1.2 ENGINEERING STANDARDS

What Engineering standards are likely to apply to your project? Some standards might be built into your requirements (Use 802.11 ac wifi standard) and many others might fall out of design. For each standard listed, also provide a brief justification.

IEEE 2841-2022: This standard is called the “IEEE Approved Draft Framework and Process for Deep Learning Evaluation.” We must eventually analyze the processes and performance of our algorithm if we end up creating a new one. This standard will help in creating the framework and infrastructure we need to evaluate it.