Types of program errors

We distinguish between the following types of errors:

1. **Syntax errors**: errors due to the fact that the syntax of the language is not respected.
2. **Semantic errors**: errors due to an improper use of program statements.
3. **Logical errors**: errors due to the fact that the specification is not respected.

From the point of view of when errors are detected, we distinguish:

1. **Compile time errors**: syntax errors and static semantic errors indicated by the compiler.
2. **Runtime errors**: dynamic semantic errors, and logical errors, that cannot be detected by the compiler (debugging).