## **Programming Languages and Translators Course Project Part 1 Report**

On this report we’ll list the participation of each of the team members on the tasks required for the first part of the project.

Scanner Implementation

* The following functionalities were elaborated on its majority by Ivan.  
  + Ignore blank spaces
    - Contributions made by José as well.
  + Ignore comments
  + Recognize keywords and return their token category
  + Recognize delimiters and one-character operators and return their ASCII code as their token category
  + Recognize two-character operators and return their token category
  + Recognize integer, double, and boolean constants, and return their token category and their value
    - Contributions made by Santiago as well.
  + Recognize identifiers and return their token category. In addition, if the identifier has not been identified, the identifier must be entered into the symbol table (if the identifier has been already identified, their number of occurrences must be incremented)
    - Contribution made by Santiago as well.
  + Print a generic error message for illegal tokens, indicating the line number where the error occurs
    - Contribution made by Santiago and José as well.
* As whole, the team contributed on decision making towards completing this particular implementation.

Symbol Table

* The symbol table wasn’t required for this delivery, nonetheless it is expected for all of the team members to work on this development.
* As of now we’ve implemented the base code provided by the instructor but no further development has been made.

Parser Implementation

* The following functionalities have been developed for this implementation
  + Implementation of base code provided by the instructor.

- Contribution made by Ivan.

* + Grammar implementation for the parser and operators.
    - Contribution made by Santiago.
  + Definitions of variable declaration
    - Contribution made by Santiago and José.
  + Definition of expression identifier
    - Contribution made by Santiago.
  + Definition of instruction assignment
    - Contribution made by José.
  + General definition of instruction list (while, if, repeat, etc)
    - Contribution made by Santiago.
  + Definition of function type declarations
    - Contribution made by Santiago.
  + Definition for calls, actuals and constants
    - Contribution made by Santiago and Ivan.