

# A STUDY AND IMPLEMENTATION OF A Z SPECIFICATION SYNTAX VERIFIER

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## ABSTRACT

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This project aims on conducting a research on Z specifications. The project's main objective is to create a syntax verifier, which would be able to check schemas based on formal methods, Z specification. Although it is a syntax verifier, the user would have to specify relational sets and abstracts set. Based upon the schema, the logic of the schema and the format of the written Z specification will be checked and verified whether or not it coincides with the sets specified. The logic of the statements within the schema and the logic of the schema coincide, therefore if the statements are incorrect, the logic of the schema will be incorrect, and therefore the syntax verifier would trace the error and highlight it. In schema writing, the names of the sets, relations, and tables are important and if the user has made a mistake in this area, the syntax verifier would be able to prompt the user of the mistake and if the user would like to make any changes to it.