AN ACL2 FORMALIZATION OF ALGEBRAIC STRUCTURES

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ABSTRACT. In this paper we present a hierarchy of algebraic structures developed in the ACL2 Theorem Prover. This question had not been undertaken in this system up to now. A methodology and a bunch of tools to handle the structures and morphisms included in our hierarchy have been designed. In order to ensure the applicability of our methodology and tools, a major issue when developing formal proofs, we have proved some results coming from Universal Algebra.

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