A MODEL CHECKER FOR $\text{KEC}_{(m)}$ AND $\text{S5EC}_{(m)}$

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We propose a model checker for $\text{KEC}_{(m)}$ and $\text{S5EC}_{(m)}$. We plan to check the satisfiability of a formula within a model M using the recursive approach we apply when doing it manually. The advantage of this approach is that the checker can show a human how to approach the problem of deciding the satisfiability of a formula within a model. This project covers Kripke models and common knowledge. Although we plan to start with a command line tool, we hope to extend the project with a website which visualizes the model and shows the users the steps taken.