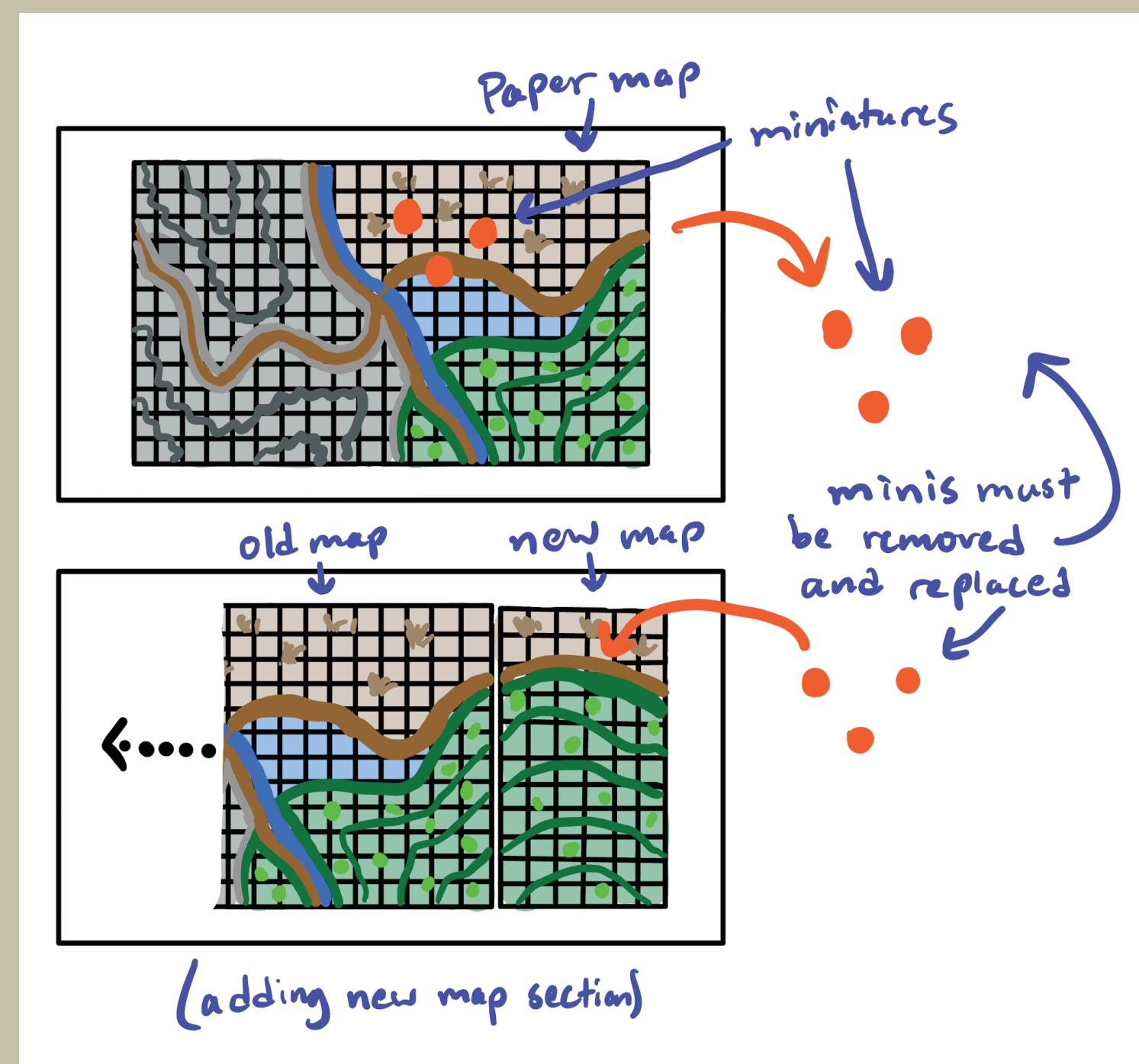


PORTABLE GAMING TABLE WITH A DIGITAL MAP

Dorian Kolis

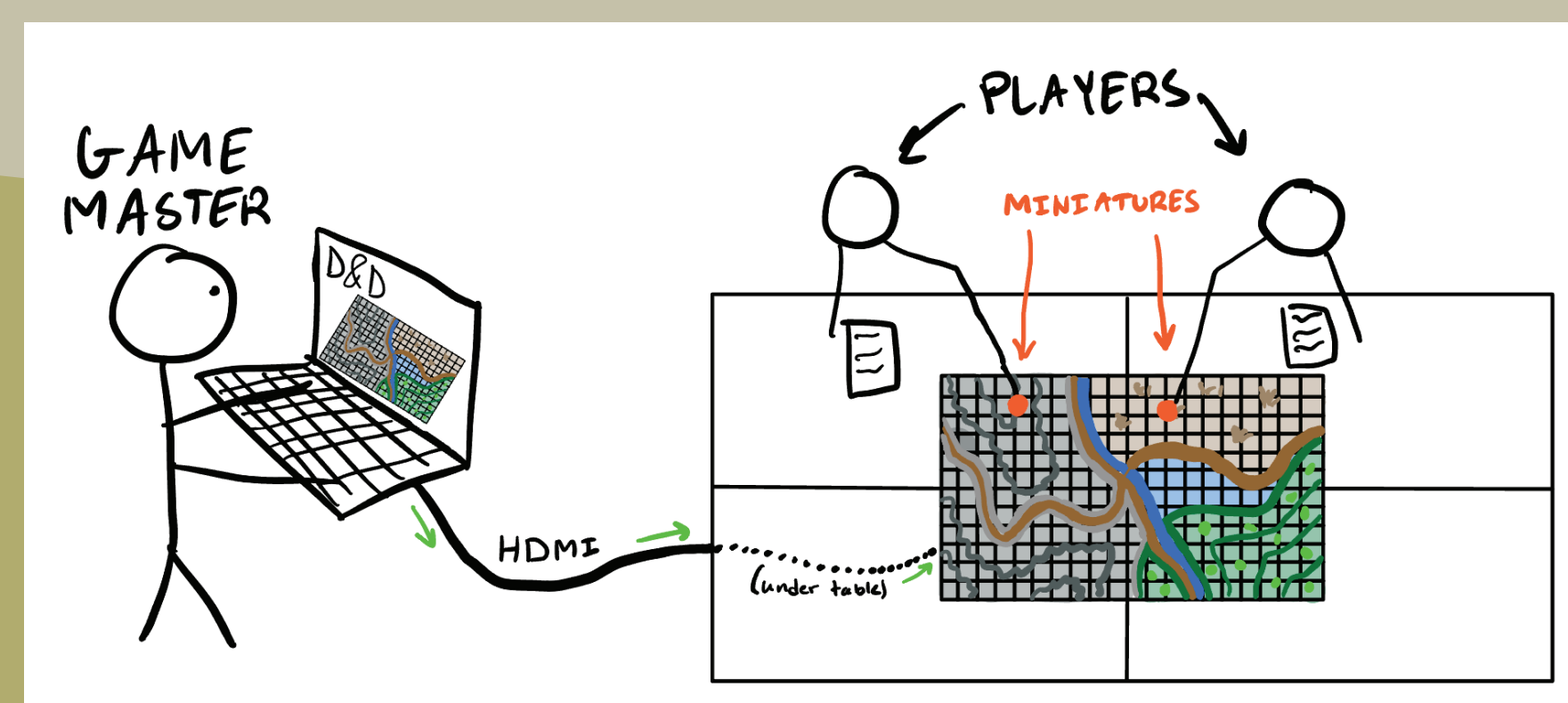
INTRODUCTION

Dungeons and Dragons usually requires maps on the table. The game master frequently needs to get up and manipulate the map. It can be annoying to move the map when there are things on top, and it can sometimes be impossible to move it without disrupting the state of game characters sitting on the map.



TO MOVE A MAP AND ADD A NEW ONE, ALL GAME PIECES MUST FIRST BE REMOVED

The solution is to put a TV horizontally in a tabletop. My table lets a game master control what is displayed on the screen through a laptop. Then player miniatures and other game pieces go on top of the TV screen. This way, the game master can move and manipulate the map endlessly without disturbing the pieces on top.



OVERVIEW OF TABLE AND ITS USE

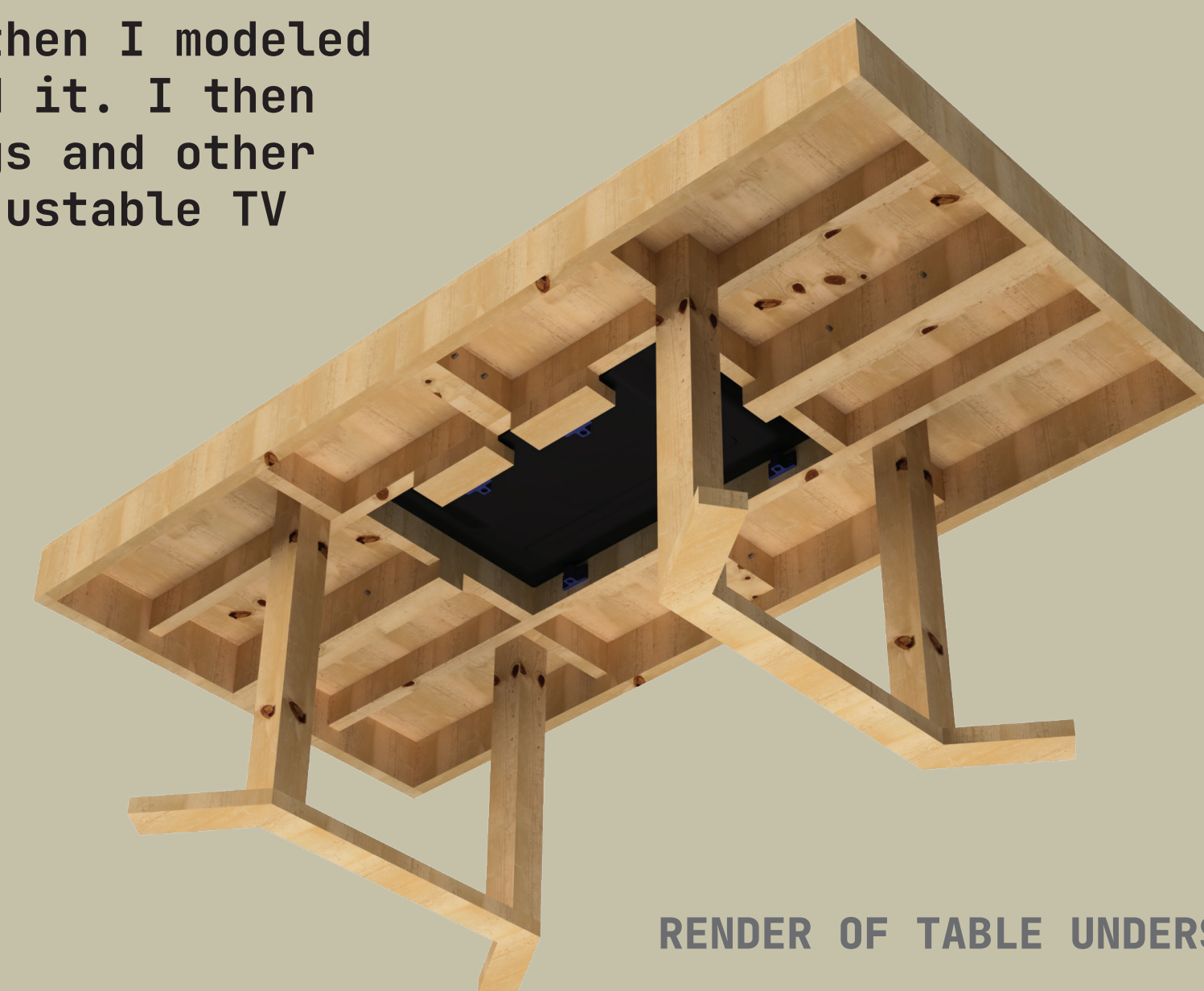
The table must disassemble small enough to be transported in a car. This means the table top is designed to break into four sections and that the legs are removable.

MECHANICAL DESIGN



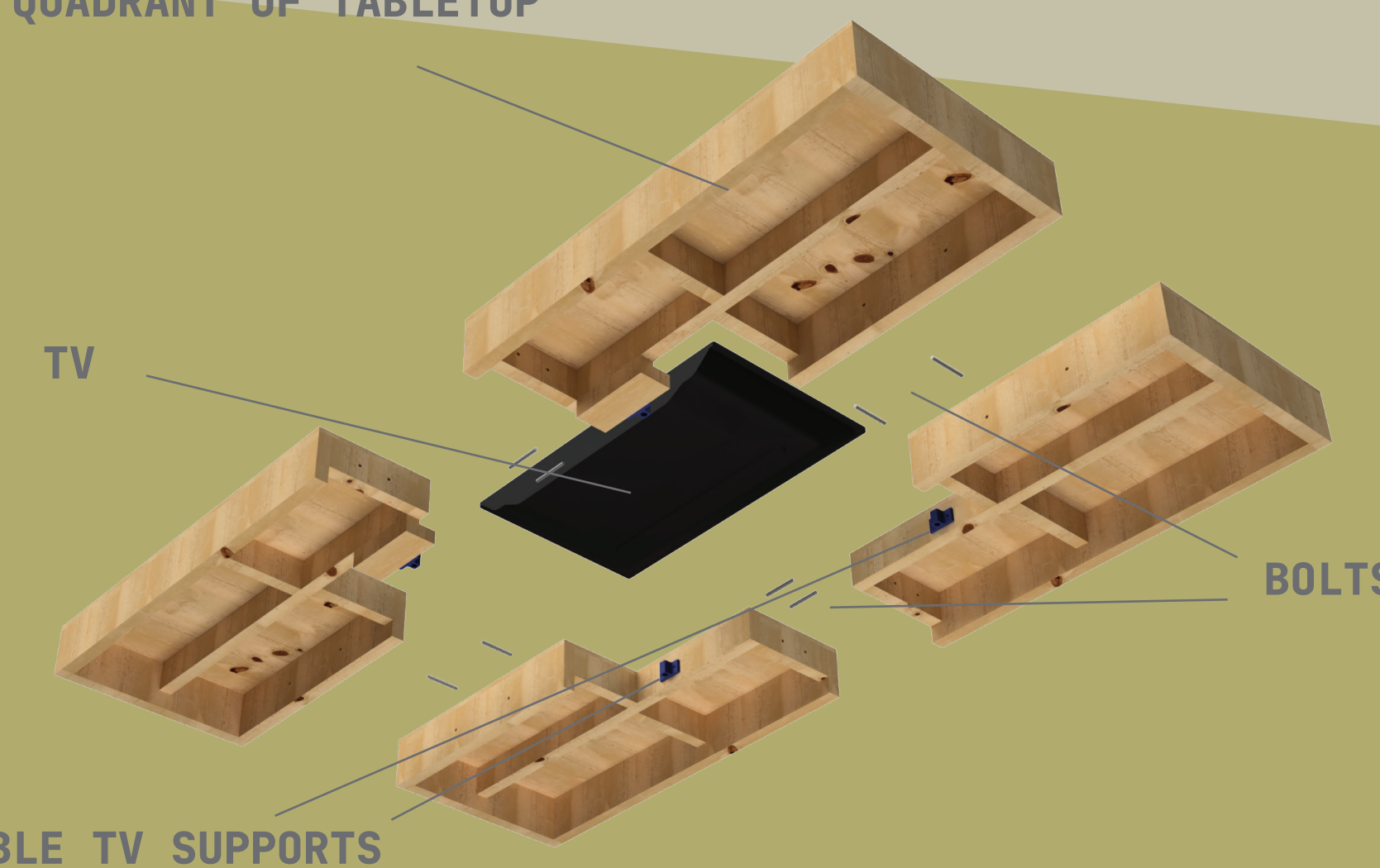
CAD

I designed the table using CAD in Fusion 360. I modeled the TV using real-world measurements, and then I modeled the table around it. I then added in the legs and other pieces, like adjustable TV supports.



RENDER OF TABLE UNDERSIDE

QUADRANT OF TABLETOP

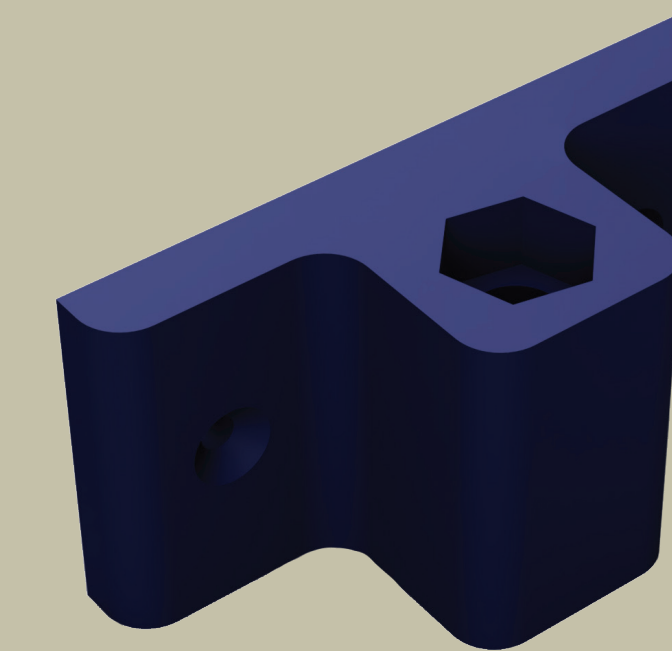


ADJUSTABLE TV SUPPORTS

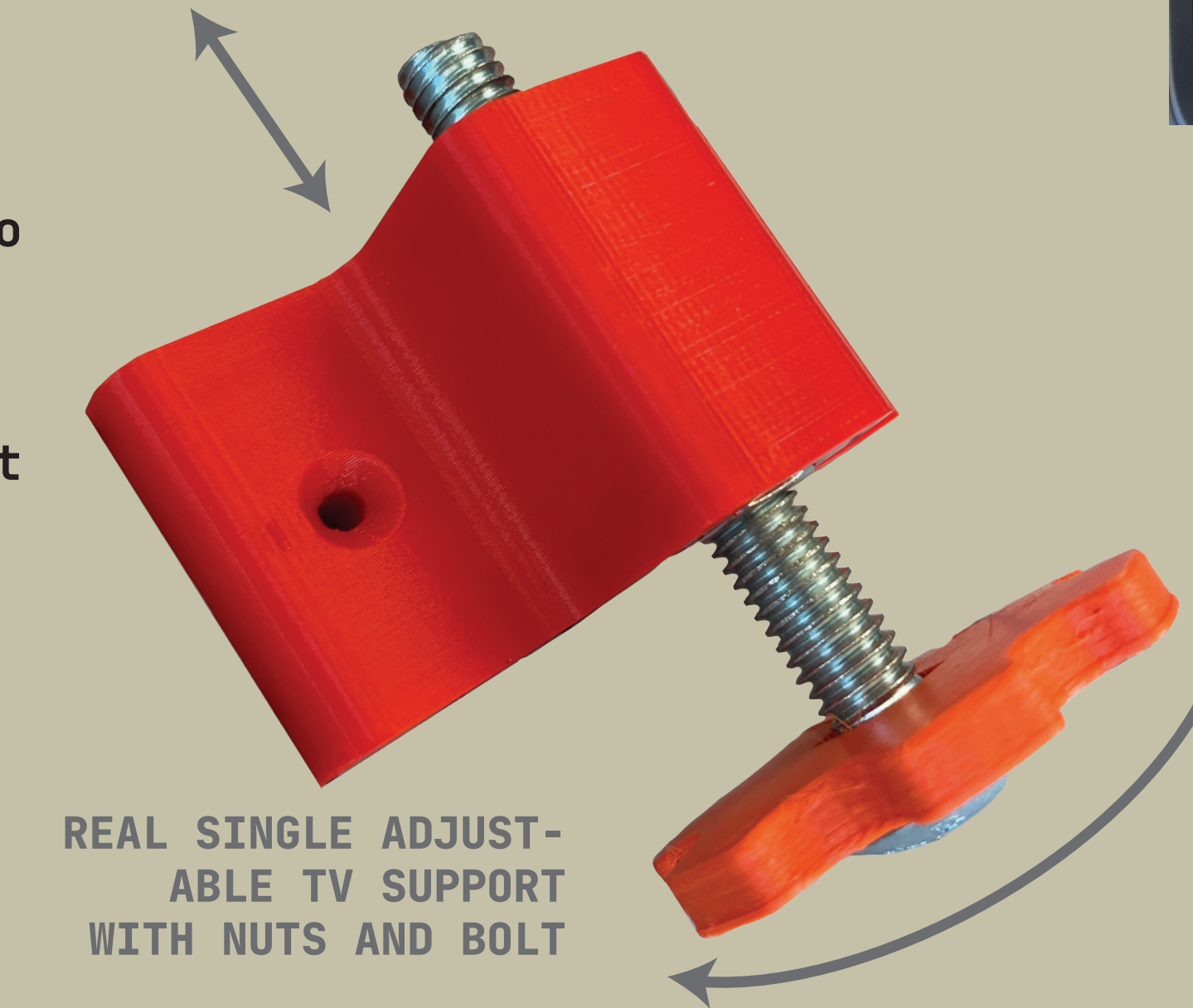
EXPLODED RENDER OF TABLE UNDERSIDE

TV SUPPORTS

RENDER OF SINGLE ADJUSTABLE TV SUPPORT

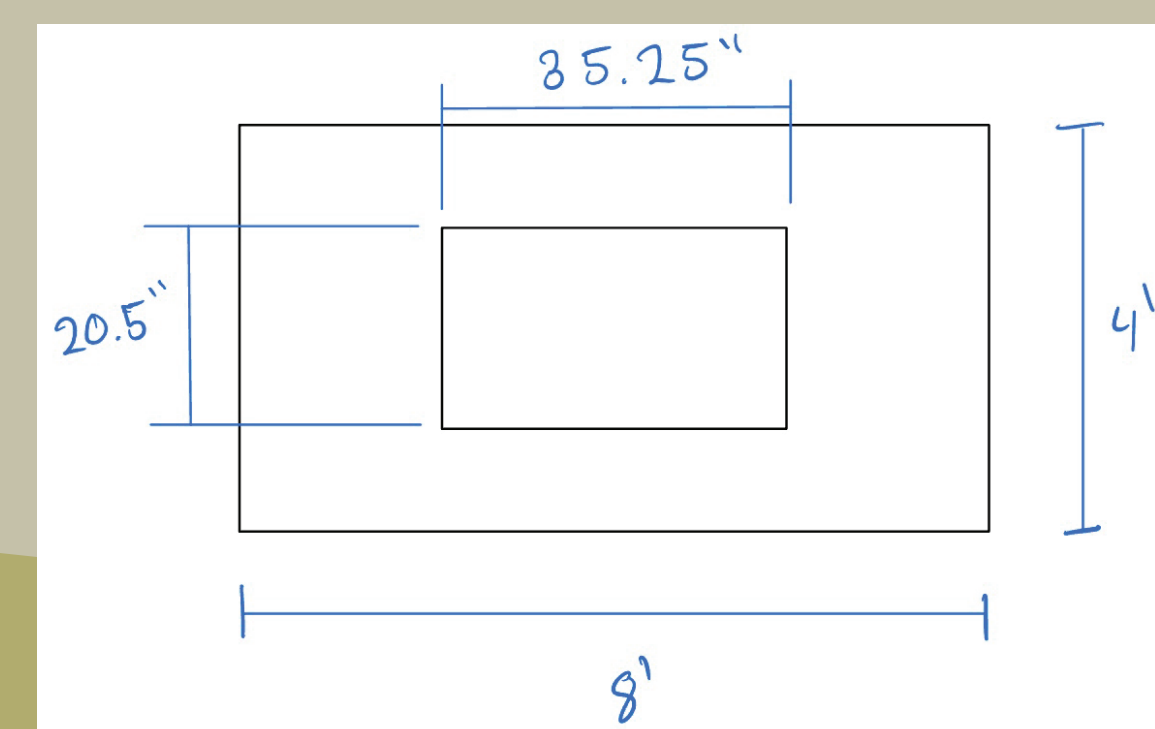


I created these 3D-printable supports to hold the TV in place inside the table. They use two nuts and a bolt to allow for fine height adjustment of each corner of the TV by raising or lowering the nut.



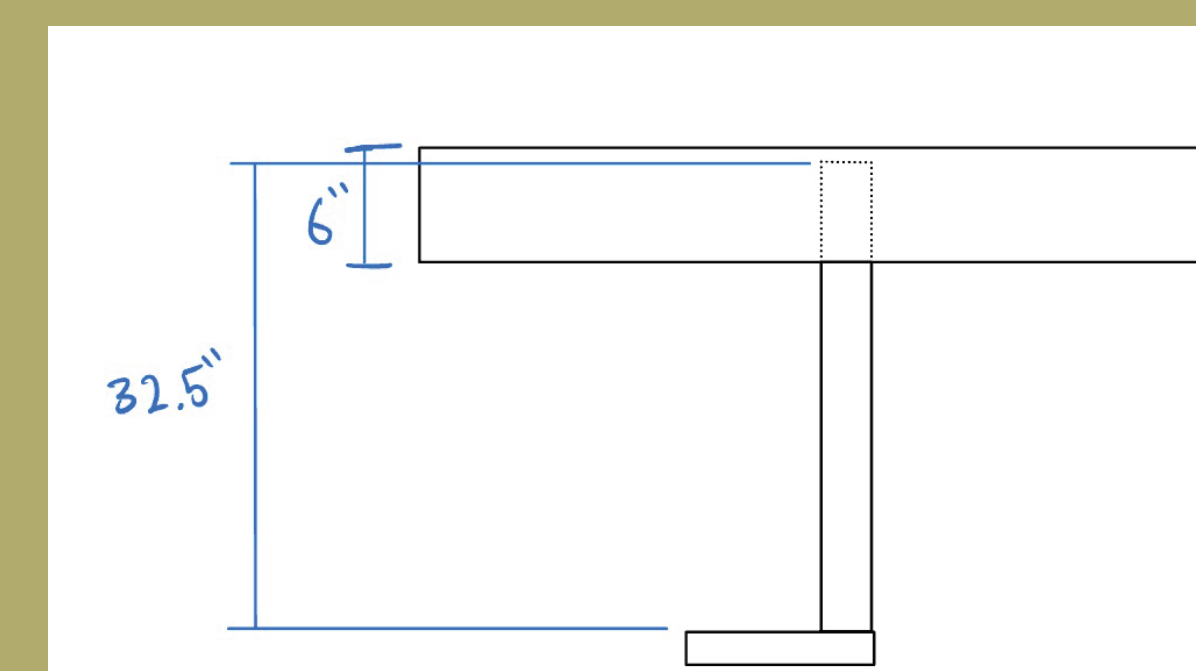
REAL SINGLE ADJUSTABLE TV SUPPORT WITH NUTS AND BOLT

DIMENSIONS



TOP DIMENSIONS OF THE TABLE

SIDE DIMENSIONS OF THE TABLE



COMPLETED VERSION



REAL TABLE WITH TV IN PLACE, DISPLAYING A D&D MAP

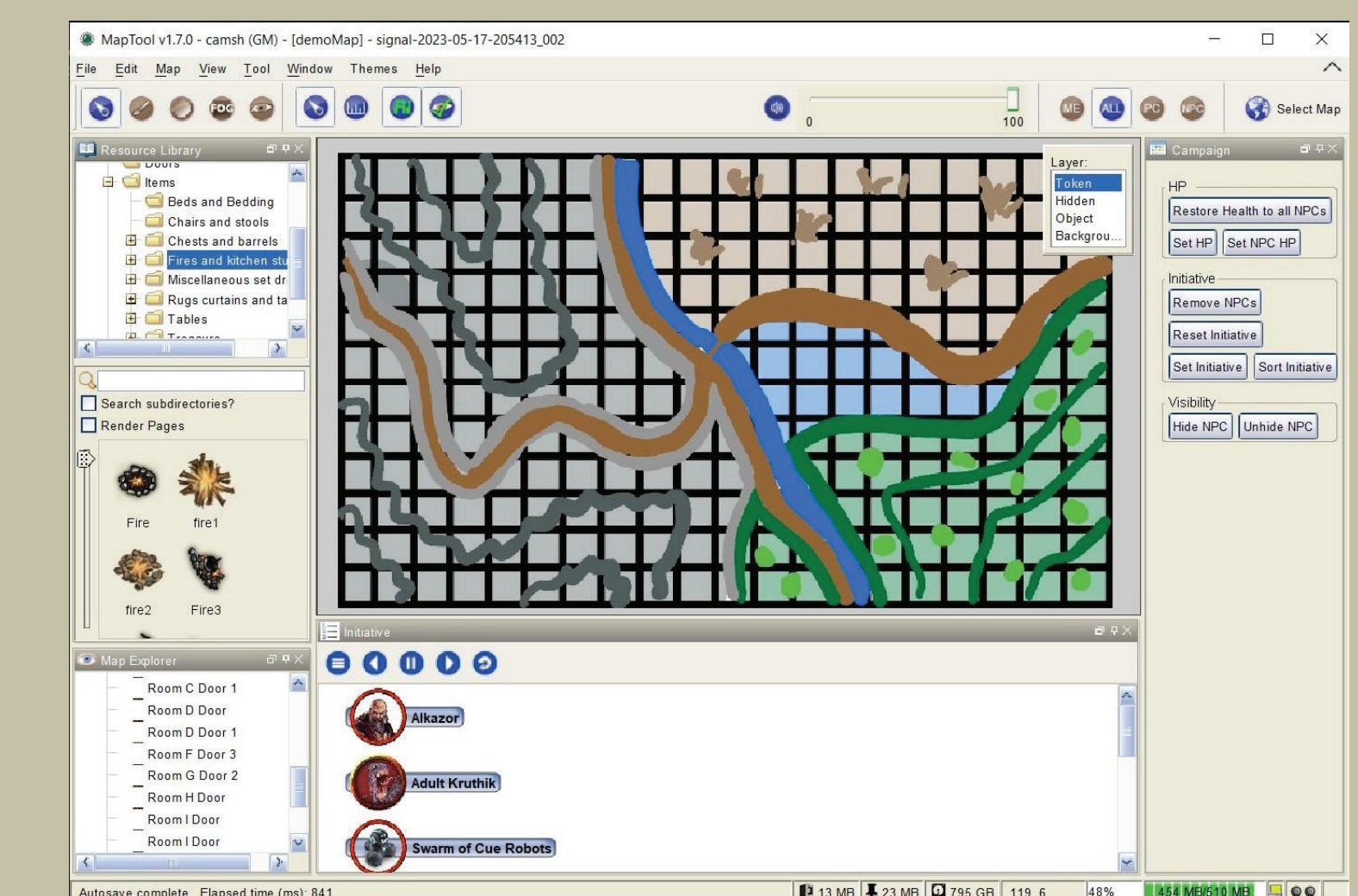


TABLE PANELS DISASSEMBLED, FIT INTO TRUNK OF CAR

The final table works at a basic level but could use some improvements. It meets the goals of portability, fitting in a car. It could benefit from some build quality improvements in a future version.

SOFTWARE

For now, the most convenient software for the game master to use is the free and open source MapTool by RPTools. It allows for customization of maps and displaying most things that would need to be displayed.



SCREENSHOT OF MAPTOOL BY RPTOOLS.NET