

Mission to Mars

Mission to Mars is a board game to illustrate iteration planning.

It is played in groups of 2 to 4 players, cooperating and competing against other groups. Players are given a *backlog*, consisting of 40 story cards. Each story card has cost in *story points* (1 to 12). Teams start with a *velocity* of 15 story-points per iteration. Teams decide what to commit for the upcoming iteration, by placing the selected cards on the board.

A throw of dice and a table lookup determine the *actual* velocity, leading sometimes to some of the cards not being completed. A second throw of dice and a table lookup determines how many bugs have been introduced in the iteration (sprint).

In subsequent iterations, the planning involves deciding how many defects to fix in addition to story cards to implement, each defect cost 1 story-point to fix

Some story cards have precedence dependencies, that is, one must be completed before another; for example, you need *Water production* before *Build hydroponic farm*.

Some constraints are added to complete some intermediary milestones at the end of some of the iterations. Some of the story cards implement temporary solutions at a low cost, but that must be reworked later, and these temporary solutions do not count in the final score.

Players can also opt to develop support tools, at a cost, to either speed up development (that is, increase velocity) or increase quality (that is, reduce defect injection). But the tools do not count in the final score.

Some velocity is lost when the number of uncorrected defect raises (drag, or friction).

Carrying over unfinished cards from one iteration to the next comes with a penalty.

The final score is computed by adding the total number of story points completed in 8 iterations, not counting temporary solutions nor the tools. Each uncorrected defect remaining costs 5 points.

The game is normally played in an hour and 15 minutes. Count some 25 minutes of discussion / debriefing at the end.