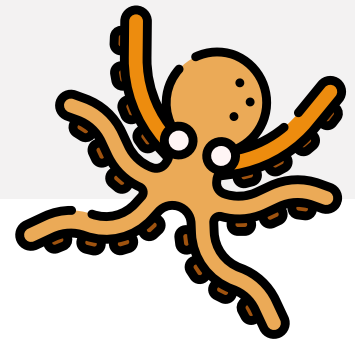# TELIUM

A text-based space adventure game tutorial by Craig 'n' Dave

Student introduction

Craig'n'Dave

THE GAME

Telium [Tel-ee-um] is a text-based adventure game based loosely on the films *Life* (2017) and *Alien* (1979). The game is coded in several stages. Each stage presents you with the base code to give you a head-start, plus additional challenges for you to extend the code further.

In the game, the player navigates around a space station called The Charles Darwin, made up of several interconnecting modules. The object of the game is to find and trap a queen alien called Telium, located somewhere in the station. Not wanting to get into a conflict with humans, the queen will attempt to escape to adjacent modules when it is encountered.

To win, the player must lock a module so the queen cannot escape. Once trapped, it can be killed with a flamethrower. The space station is also populated with additional objects to enhance the adventure.

THE STORY

A remote probe on the surface of Mars has detected biological signatures of dormant, single-celled, primitive life. A sample of the Martian soil is returned to a space station orbiting the Earth for further analysis.

The orange-coloured cells are examined and DNA analysis shows remarkable similarities to Dictyostelium discoideum, a species of soil-living amoeba from Earth. Commonly referred to as slime mould, it transitions from a collection of unicellular amoebae into a multicellular organism and then into a fruiting body.

Nicknamed Telium due to its colour and cellular structure, the sample is incubated in a lab with conditions similar to Mars' ancient past when it was a warmer, wetter planet.

Remarkably, independent Telium cells slowly begin to move and, after a period of several days, join together to form an organism resembling a slug. In the coming days, the creature grows additional arms and begins to look like a large starfish. Intrigued, scientists continue to examine the creature, which appears to be consuming bacteria from inside the incubation chamber and growing in size with each passing day.

Telium begins to show signs of advanced movement around the chamber, and its strength increases significantly. Eventually, it becomes strong enough to break out of its chamber and suffocates a scientist. The creature scuttles through the space station to an unknown location.

Telium is not seen for several days, but tension between the astronauts escalates when electronics on the station begin to behave erratically, power starts draining and communication with Earth is lost.

"We are on our own. Telium must be found and destroyed," the captain orders. "There is no protocol for this, but we cannot risk further loss of life. We must stick together and work it out."

GAME MECHANICS

The space station has a limited amount of power which reduces on each turn – this provides a timer for the game. Telium, the queen alien, must be killed before the power runs out. To kill aliens, the player is equipped with a flamethrower, which requires fuel.

The player also has a portable computer called a scanner, which provides limited interaction with the space station. On each turn, the player can use the scanner to lock doors in a module. Locking doors prevents aliens from moving to that module. Due to the station malfunction, only one module can be locked at a time.

A player can move to an adjacent module. Each module may contain:

- **A ventilation shaft opening**. In these modules, the doors will lock on entry, forcing the player to move through the ventilation shaft. The dark passages lead to another random module. The player arrives in the new module and cannot return through the vent in the roof.

- **The queen alien (Telium)**. When the player enters the same module as Telium, it will attempt to escape via the random adjacent modules. It can take anywhere between one and three moves. If it arrives in a module with a ventilation shaft, it will travel through it, arriving in a random module. If Telium is unable to move because the only adjacent module is locked, the player wins.

- **Worker aliens**. Spawned asexually from the queen, worker aliens gather bacteria for the queen to feed. They will attack if the player enters a module they are in. The player has the option to either frighten the worker or attempt to kill it, both using fuel in the flamethrower. The amount of fuel required is not known by the player and will need to be deduced over several play attempts. If the player does not manage to frighten or kill the worker alien, they will die, losing the game.

- **An information panel**. Costs station power to use. Scans the space station and reveals the location of the queen. The remaining power in the station is also displayed via the panel.

YOUR TASK

Type up the programs and then extend the code by completing challenges. There is plenty of scope to add to the game mechanics in many interesting ways once the program is complete.

You do not need to complete these challenges to progress to the next stage – the program will continue to work without them. You can return to a previous challenge later if you want to.