

Space Careers Wayfinder The Artemis Exhibition | Data Collection and Analysis

Public facilities such as museums, galleries and education centres frequently have a rolling program of activities and events. They do this to maintain and/or increase visitor numbers as well as keep abreast of the latest trends and developments.

The Project



The state/territory and federal governments have provided joint funding for the development of a new exhibition which will feature NASA's Artemis Program. The Artemis Program aims to land humans on the surface of the Moon, and eventually to build a base there to support human settlement. The base could ultimately become the launchpad for a mission to Mars (Image on the right links to the Artemis Program).



The Task

The company you work for has been selected for the development of the new Artemis exhibition space. After a meeting to discuss the project, your team have been tasked with developing the digital systems.

Information

The education centre management have identified a number of administration areas to be addressed using digital technologies:

- 1. Collect anonymous feedback from visitors to the new exhibition
- 2. Collect visitor postcodes to help inform future marketing campaigns
- 3. Track and record the number of visitors to the new exhibition space
- 4. Compare the number of visitors to the new exhibition space with the total number of visitors to the education centre

Other digital technologies tasks include:

- 1. Track and record the number of times an exhibit is visited
- 2. Track and record the length of time visitors spend at each of the exhibits
- 3. Design a game which captures the essence of the Artemis Program. NOTE the centre management will consider a range of games. These might cover gamifying a fully crewed mission to the Moon or a smaller component such as docking the capsule with Gateway or landing the lunar lander at the pre-staging site on the Moon.

Further Information

- The exhibition space will contain 18 exhibits, of which 12 will be interactive hands-on exhibits and 6 will contain information. Your team will develop 2 of the interactive exhibits including the game.
- The education centre management would like to offer an annual membership to the centre along with discounted events at the centre for members.

Considerations

- Who will be the users of your digital system?
- What will your digital system look like? What are main components and any peripheral devices?
- Considering the different ways visitors will interact with the exhibits - what type of user interface/s will you use?
- The education centre needs accurate figures of visitors to the exhibition but can't manually collect these. How will these be collected?
- Oifferent types of data collected need to be presented in a way non-IT personnel can access and understand
- Any data containing personal details will need to be validated and stored securely
- What will entice visitors to return? What will they gain from subsequent visits that is not already achieved in the first visit? E.g. engaging gamification aspect that they do not easily conquer on the first visit