









Desert Camp

Create a Desert Living Animation for BloodhoundSSC Using Alice

Desert Camp – Project Brief

Overview

The <u>BLOODHOUNDSSC</u> is a supersonic car that is designed not only to go faster than the speed of sound (supersonic) but to over 1,000mph (1,600km/h). It will cover a mile in just 3.6 seconds.

The BLOODHOUNDSSC will attempt to set the World Land Speed Record on a desert track in the Hakskeen Pan desert area in northern South Africa.



There are no facilities of any kind there, it is essentially a blank desert landscape 145 miles from the nearest town. The BloodhoundSSC project team, the car and all of their equipment have to be transported there and set up to run the project at its crucial final phase, leading to the record attempt. This involves upwards of 50 personnel for up to 90 days.

The Desert Layout



Specification:

The challenge is to use your knowledge from the Oracle Academy - <u>Getting Started with Java Using</u> <u>Alice</u> workshop in a box to design and create an animation of the environment required to house and maintain the team and the car for this extended period of time.

When planning your storyboard and animation take into account the following necessities and possible challenges the team will face living in a desert environment:

- Water required for washing, drinking, cleaning, cooking & other purposes (where is the water coming from?)
- Weather conditions including extreme heat and sandstorms monitoring weather
- Shelter (team) somewhere to sleep and live, storage of personal items, number of people
- Food healthy diet, food storage, cooking, somewhere to eat, re-supply

- Power Generation (Diesel Generator, Wind Turbine, Solar Panels) for computers, radios, tools, cooking equipment, etc. What about cables?
- Security of the team, the site, the car
- Environment to store and maintain the Bloodhound car shelter/workshop, fuel, tools
- Sanitation toilet facilities, washing facilities, waste
- Communication facilities
- Medical facilities
- Emergency Arrangements
- Transportation
- Hazardous materials i.e.- rocket fuel and ways to protect those refueling the car.

Suggested Project Timing (90 Mins)

Review BloodhoundSSC Videos 10 minutes

Desert Living Slide show presentation 10 minutes

Group work (teams of up to Four students) 60 minutes.

Group presentations to the rest of the class 15 minutes.