

Project 2 – Intro 3&4

Session	Date	Topic	Aim/ Target Language	Output
1		Movie genres – Part 1	<ul style="list-style-type: none"> • Vocabulary: movie, scene, character, action movies, comedy movies, drama movies, adventure movies, Science Fiction (Sci-Fi) movies, fantasy movies • Structure: Refer to Appendix 1.0 	Presenting a movie poster and talking about its genre and crew (mentioning what each person is responsible for)
2		Movie genres – Part 2	<ul style="list-style-type: none"> • Vocabulary: Fantasy movies, horror movies, animated movies, musical movies • Structure: Refer to Appendix 1.1 	
3		Movie crew	<ul style="list-style-type: none"> • Refer to Appendix 1.2 	
4		Presentation	Rehearsing the presentation	

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Project 2 – Intro 2

Session	Date	Topic	Aim/ Target Language	Output
1		The Earth	The Earth, ocean, land, continent Oceans: Pacific Ocean, Atlantic Ocean, Indian Ocean, Arctic Ocean and the Southern Ocean, Continents from largest to smallest: Asia, Africa, North America, South America, Antarctica, Europe, and Australia	Showing the world map on Google Map, zooming in and showing different locations on the map Making a poster of the world map, marking the major countries and cities
2		Asia	It's the largest continent. Over 4 billion people live in Asia. Major countries and their capitals: Moscow – Russia, Beijing – China, Seoul – South Korea, Delhi – India, Tehran – Iran, Ankara – Turkey, Tokyo – Japan, Kuala Lumpur – Malaysia, Cairo – Egypt, Abu Dhabi – United Arab Emirates	
3		Africa	It's the second largest continent Major countries and their capitals: Algiers – Algeria, Pretoria – South Africa, Cairo – Harare – Zimbabwe, Egypt, Abuja – Nigeria, Tripoli – Libya, Nairobi – Kenya, Addis Ababa – Ethiopia, Rabat – Morocco, Kampala – Uganda	
4		North America	Major countries and their capitals: Washington DC, D.C. – The United States, Ottawa – Canada, Mexico City – Mexico, Guatemala City – Guatemala, San Jose – Costa Rica, Havana – Cuba, Nuuk – Greenland	
5		South America	Major countries and their capitals: Brasilia – Brazil, Buenos Aires – Argentina, Lima – Peru, Bogota – Colombia, Santiago – Chile, Caracas – Venezuela	
6		Europe	It's the second smallest country. Berlin – Germany, Paris – France, Rome – Italy, London – United Kingdom, Athens – Greece, Kyiv – Ukraine, Madrid – Spain, Stockholm – Sweden, Copenhagen – Denmark, Bern – Switzerland, Amsterdam – Netherlands, Tbilisi – Georgia, Moscow – Russia, Istanbul – Turkey	
7		Australia	It's the smallest continent. Major countries and their capitals: Canberra – Australia, Jakarta – Indonesia, Wellington – New Zealand, Suva – Fiji	
8		Review	-	

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Project 2 – EI & PI

Session	Date	Topic	Aim/ Target Language	Output
1		Eye anatomy	<ul style="list-style-type: none"> Getting familiar with the main parts of the eye and their functions (Refer to Appendix 3.0) 	<p>Students (in groups) present a model/ poster to talk different parts of an eye and how we see</p>
2		How do we see?	<ul style="list-style-type: none"> Learning about how eyes work (Refer to Appendix 3.1) 	
3		Prosthetic eyes	<ul style="list-style-type: none"> Comparing prosthetic eyes and real eyes (Refer to Appendix 3.2) 	
4		Making a model	<p>Building a model/ Making a poster of an eye Rehearsing the presentation</p>	

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Project 2 – I & UI

Session	Date	Topic	Aim/ Target Language	Output
1		Solar system	<ul style="list-style-type: none"> Getting familiar with the solar system Being able to provide a few facts regarding to each planet. (Refer to Appendix 2.0) 	Presenting a slideshow and talking about solar system and black holes
2		Introduction to black holes	<ul style="list-style-type: none"> Gaining a basic understanding of black holes and their characteristics (Refer to Appendix 2.1) 	
3		Black holes	<ul style="list-style-type: none"> Watching a movie about black holes Learning the key facts and key phrases presented in the movie 	
4		Making a slideshow	Rehearsing the presentation	

Appendix 1.0

Action Movies

- Action movies are full of exciting scenes with a lot of movement and physical activity.
- They often have a lot of fight scenes or chase scenes.

Comedy Movies

- Comedy movies are meant to make you laugh and feel happy.
- They often have funny characters, jokes, and humorous situations.
- Classic comedy actors include Jim Carrey and Charlie Chaplin.

Drama Movies

- Drama movies are serious and emotional. They often focus on deep human feelings.
- They can be about real-life situations and may make you cry or think deeply.
- Famous drama movies include “**The Separation**”.

Science Fiction Movies

- Science fiction movies are about the future or things that don't exist yet, like aliens or advanced technology.
- Famous sci-fi movies include "Star Wars".
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Fantasy Movies

- Fantasy movies take us to magical worlds with mythical creatures and enchanting adventures.
- They often involve wizards, dragons, or other magical beings.
- Popular fantasy films include "The Lord of the Rings" and "Harry Potter."

Appendix 1.1

Horror Movies

- Horror movies are meant to scare and thrill us. They often have monsters, ghosts, or murderers.
- Famous horror movies include "The Shining."

Animation Movies

- Animation movies use drawings, computer graphics, or stop-motion to tell a story.
- They are not just for kids – many adults enjoy animated films too.
- Beloved animated movies include "Toy Story" and "Frozen."

Adventure Movies

- Adventure movies are all about excitement, exploration, and taking risks.
- They often involve treasure hunting, daring journeys, or quests.
- Popular adventure films include "Indiana Jones" and "Pirates of the Caribbean."

Musical Movies

- Musical movies combine storytelling with song and dance.
- Characters often express their emotions through music.

Appendix 1.2

1. Director

- The director is like the captain of the ship, responsible for overseeing the entire filmmaking process.
- They guide the actors and make decisions.

2. Producer

- Producers handle the business side of the film, including budgeting and financing.

3. Screenwriter

- The screenwriter is the storyteller who creates the script or screenplay.
- They develop the plot, characters, and dialogues.

4. Cinematographer (Director of Photography)

- The cinematographer is in charge of the camera and lighting crews.
- They decide how the film looks, including the framing, lighting, and camera angles.

5. Costume Designer

- The costume designer selects and creates the clothing and costumes for the characters.

6. Sound Designer

- Sound designers create the auditory part of the film, including music, sound effects, and dialogue.

9. Makeup Artist

- Makeup artists are responsible for the appearance of the actors, including their hair and makeup.

10. Special Effects (SFX) Supervisor

- SFX supervisors handle visual effects in the film.
- They create explosions and monsters.

Appendix 2.0

- Mercury:
 1. Closest to the Sun, it has extreme temperature variations, from scorching hot to freezing cold.
- Venus:
 1. Known as Earth's "sister planet" due to its similar size and composition, but it has a thick, toxic atmosphere.
- Earth:
 1. The only planet known so far to support life, with a diverse range of ecosystems and species.
 2. It has a unique feature, the presence of liquid water on its surface, essential for life as we know it.
- Mars:
 1. Often called the "Red Planet" due to its rusty appearance caused by iron-rich soil and rocks.
 2. It has the largest volcano in the solar system, Olympus Mons, and the deepest canyon, Valles Marineris.
- Jupiter:
 1. The largest planet, more massive than all the other planets.
 2. It has a prominent feature called the Great Red Spot, a massive storm that has been raging for centuries.
- Saturn:
 1. Known for its stunning ring system, composed of countless icy particles and rocks.
 2. It is the least dense of all the planets which means it would float in water if you had a big enough bathtub.
- Uranus:
 1. It is tilted on its side which gives it a unique appearance.
 2. It has a blue-green hue due to the presence of methane in its atmosphere.
- Neptune:
 1. The farthest known planet from the Sun, with a deep blue color and powerful winds.
 2. It has a famous dark storm called the "Great Dark Spot," similar to Jupiter's Great Red Spot.

Appendix 2.1

1. What is a black hole?

A black hole is a region in space where the gravitational pull is so strong that nothing, not even light, can escape from it.

2. How are black holes formed?

Black holes are formed from the remnants of massive stars that have undergone gravitational collapse.

3. What are the three main types of black holes?

Stellar-mass black holes, intermediate-mass black holes, and supermassive black holes are the three main types of black holes.

4. What is the event horizon of a black hole?

The event horizon is the boundary surrounding a black hole beyond which nothing can return, not even light, making it the point of no return.

5. Do black holes have a size limit?

Black holes can come in a range of sizes, but supermassive black holes at the centers of galaxies can be millions or even billions of times more massive than our Sun.

6. What happens to matter that falls into a black hole?

Matter that falls into a black hole is compressed and its information is lost. It's thought to contribute to the black hole's mass and increases its gravitational pull.

7. What is Hawking radiation, and how does it relate to black holes?

Hawking radiation is theoretical radiation predicted by Stephen Hawking. It suggests that black holes can emit tiny amounts of particles, gradually losing mass over time.

8. Can we see black holes directly?

We cannot see black holes directly, as they do not emit light. However, we can observe their effects on nearby objects and detect radiation from accretion disks around them.

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9. How are black holes detected and studied?

Astronomers use various methods, including studying the motion of nearby stars, observing X-rays from matter falling into black holes, and gravitational wave detectors to study black holes.

10. Are there any known supermassive black holes in our galaxy?

Yes, the Milky Way galaxy is believed to host a supermassive black hole at its center, known as Sagittarius A* (pronounced "A-star").

11. Can we time travel using black holes?

Some scientists think that it might be possible to travel through time near a black hole, but this idea is still mostly a guess.

12. What is time dilation near black holes, and how does it connect to time travel?

Time dilation near black holes, which is a consequence of Einstein's theory of relativity means that time goes slower for someone close to a black hole compared to someone farther away. This effect has led to discussions about the potential for time travel, as it could allow for "time jumps" into the future, but it's still a big question mark in science.

Appendix 3.0

1. Cornea: The cornea is like a clear window at the front of your eye. It helps to focus light onto the inside of your eye.
2. Iris: The iris is the colored part of your eye. It's like the curtain of the eye. It can open and close to control how much light enters the eye.
3. Pupil: The pupil is the black spot in the middle of your eye. It's a small hole that can get bigger or smaller to let in more or less light.
4. Lens: The lens is behind the pupil. It's like a little magnifying glass that helps to focus the light on the back of the eye.
5. Retina: The retina is at the back of your eye. It's like a screen that collects the light and turns it into signals that go to your brain.
6. Optic Nerve: The optic nerve is like a cable that carries those signals from the retina to your brain so you can see and understand what you're looking at.
7. Sclera: The sclera is the white part of your eye. It's like the protective outer covering of your eye.

Appendix 3.1

How do we see things? Well, it's actually more complicated than you might think! When we look at something, light from that object enters our eyes through the front window, which is called the cornea. Think of the cornea as a shield, like the glass of a camera lens. It helps to bend the light rays so that they go into the eye properly.

The amount of light that enters the eye is controlled by two other important parts: the iris and the pupil. The iris, the colored part of our eye, acts like a curtain that can open or close to let in more or less light. The pupil, a small black spot in the center, acts like a tiny adjustable window that can get bigger or smaller to control how much light comes into the eye.

After passing through the cornea, the light reaches the lens which is located just behind the pupil. It is like a magnifying glass that makes the light focus just right, so we can see things clearly at the back of the eye.

The back of the eye is where the magic happens. Here, there is a special layer called the retina, which is similar to the film or sensor in a camera. The retina's job is to convert the light into signals. It has lots of tiny cells that act like pixels, capturing different parts of the image. These cells then send signals through a bundle of nerves known as the optic nerve.

The optic nerve is like an information highway that carries all the signals from the retina to the brain. Once the signals reach the brain, it puts all the signals together, like puzzle pieces, and forms a complete picture of what we're looking at. This allows us to see and understand the world in front of us. **It's absolutely amazing, isn't it?**

Appendix 3.2

1. What is a prosthetic eye?

- A prosthetic eye, also known as an artificial eye, is a special kind of eye made by doctors to help people who don't have a real eye.

2. How is it similar to a real eye?

- Both artificial and real eyes can look similar from the outside, so they appear natural.

3. How is it different from a real eye?

- Prosthetic eyes don't see like real eyes. They're not able to see or send signals to the brain. Real eyes can see and send information to the brain to understand what we see.

4. Can it move like real eyes?

- Prosthetic eyes usually can't move on their own like real eyes. Real eyes can move in different directions to look at things.

5. How does it work?

- An artificial eye doesn't work like a real eye. It's a replacement for a missing or damaged eye. It looks like a real eye but can't see. It stays in place, helping the person look more natural. Scientist are still researching and testing new models to