

AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH

COMPUTER GRAPHICS – PROJECT DOCUMENTATION

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| --- | --- |
| **Course Name** | Computer Graphics |
| **Section** | A |
| **Course Tutor** | Md. Masum Billah |
| **Project Title** | Artemis program |

**Group Members Information:**

|  |  |
| --- | --- |
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**Table of Content:**

|  |  |
| --- | --- |
| **Content List** | **Page No** |
| Introduction | 04 |
| Proposal | 03 |
| Schematic Diagram | 04 |
| List of Objects | 04-06 |
| Functions to Represent the Objects | 06 - 08 |
| Interactive Functions | 09 |
| Task Assignment and Codes of Functions | 10-11 |
| Output | 12-14 |
| Conclusion | 14 |

**Introduction**

The project will demonstrate a minimal look NASA's program to return astronauts to the lunar surface. We implemented a scenario of three view which are rocket launch, rocket in outer space and rocket land on moon; there will be day night features in all the views by the button press. There will sound effect of each difference scene. All together it would render a scenario of the NASA’s Artemis program. Our program provides fast and accurate rendering of the objects. as well as a landscape to simulate the views.

**Proposal**

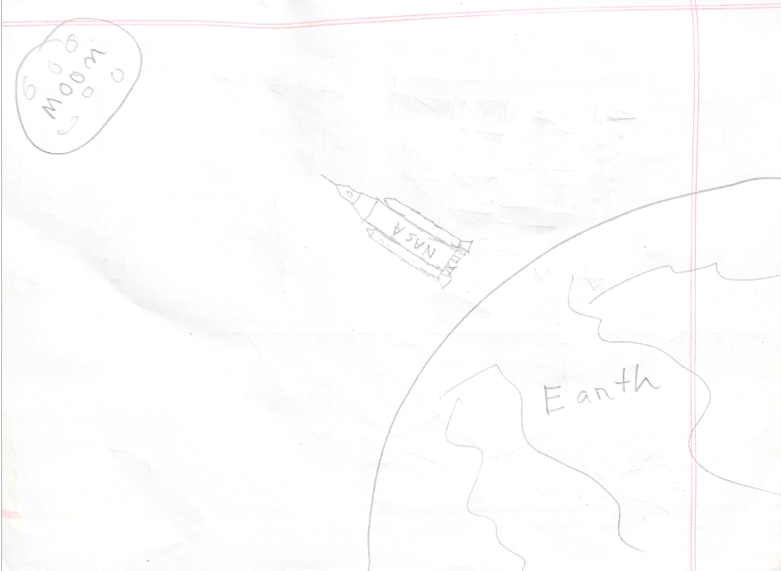
The project about a scenario type. There will be a real-life scenario about “NASA's Artemis program”. There will be mountain, rockets, lunch platforms, earth from outer space, night stars, moon. There will be some keyboard connection which will be created. In the scenario there will be lunch and landing views start using keyboard.

**Schematic Diagram**

**Scenario 1**



**Scenario 2**



**List of Object**

1. Rocket
2. Sun
3. Tower
4. Moon
5. Cloud
6. Tree
7. Lunch pad
8. Smoke
9. Nasa building
10. Day sky
11. Night sky
12. Moon floor
13. Water
14. Earth
15. Earth mountain
16. Moon mountain
17. Astronaut
18. Night mountain
19. Moon base
20. Moon tree
21. Moon buildings

**Funtions to Represent The Objects**

|  |  |  |
| --- | --- | --- |
| **Object** | **Function** | **ID** |
| ship 1 | Void ship() | **1010** |
| Ship2 | Void ship\_2 () | 1011 |
| Tower | Void tower() | 1012 |
| Rain | Void rain() | 1013 |
| Sun | Void sun() | 1014 |
| Moon | Void Moon() | 1015 |
| Cloud | Void Cloud() | 1016 |
| Bird | Void Bird() | 1017 |
| Tree | Void Tree() | 1018 |
| Umbrella | Void Umbrella() | 1019 |
| Seat | Void Seat() | 1020 |
| Balloon | Void Balloon() | 1021 |
| Day sky | Void Day\_sky() | 1022 |
| Evening sky | Void Evening\_sky() | 1023 |
| Stars | Void stars() | 1025 |
| Night sky | Void Night\_sky() | 1026 |
| Sea Texture | Void Sea\_Texture() | 1027 |
| Day Sea | Void Day\_Sea() | 1041 |
| Evening sea | Void Evening\_Sea() | 1028 |
| Night sea | Void Night\_Sea() | 1029 |
| Sea wave | Void Sea\_Wave() | 1030 |
| Day mountain | Void Day\_Mountain() | 1031 |
| Evening mountain | Void Evening\_Mountain() | 1032 |
| Night mountain | Void Night\_Mountain() | 1033 |
| Mill | Void Mill() | 1034 |
| Day sand Texture | Void Day\_sand\_Texture() | 1035 |
| Evening sand Texture | Void Evening\_sand\_Texture() | 1036 |
| Night sand Texture | Void Night\_sand\_Texture() | 1037 |
| Day Sand | void Day\_Sand() | 1038 |
| Night Sand | void Night\_Sand() | 1039 |
| Evening sand | void Evening\_Sand() | 1040 |

**Interactive Functions**

|  |  |  |
| --- | --- | --- |
| **Interactive Functions** | **Interaction** | **ID** |
| update\_sun | sun\_move, sun\_update | 1001 |
| update\_ship | sea\_move, sea\_update | **1002** |
| update\_sea\_wave | sea\_move,sea\_wave\_update | 1003 |
| update\_moon | moon\_move, moon\_update | 1004 |
| update\_cloud | cloud\_move, cloud\_update | 1005 |
| update\_balloon | balloon\_move, balloon\_update | 1006 |
| update\_bird | bird\_move, bird\_update | 1007 |
| update\_rain | rain\_move, rain\_update | 1008 |

**Task Assignment and Codes of Funchtions**

**Contribution Table:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tiham Md. Inkiad** | **YEASIR AHNAF ASIF** | **DURJOY GHOSH** | **SHORNALI AKTER** | **TOTAL** |
| 25% | 25% | 25% | 25% | 100% |

|  |  |
| --- | --- |
| **Name**  **ID** | **Contribution in Project** |
| **Member-1** | 1. Rocket launch pad 2. Cloud 3. Sun 4. balloon 5. Moon |
| **Member-2** | 1. Earth view added from moon 2. Rocket landed on moon 3. Added rocket door 4. Astronaut added 5. Added rocket fire off 6. Astronaut landed on moon 7. Added house 4,5,6 |
| **Member-3** | 1.Moon sky added 2. hills added 3. surface shadow added 4. tree added 5. building added 1,2,3 |
| **Member-4** | 1. Rocket 2. Moon 3. Earth |

**OUTPUT**

|  |  |
| --- | --- |
| **Day View** |  |
| **Rocket lunch**  **And background(Tiham md inkiad)** |  |
| **Outer space (SHORNALI AKTER)** |  |
| **Moon base**  **View (**YEASIR AHNAF ASIF **)** |  |
| **Moon base**  **View (**DURJOY GHOSH**)** |  |
| **Moon base (**YEASIR AHNAF ASIF and DURJOY GHOSH**)** |  |

**Conclusion**