**American International University Bangladesh**

**A blue circle with text and images

Description automatically generated**

**Computer Graphics**

**Spring Semester 2024-25**

**Project Report**

**Under the Guidance of**

**Aneem Al Ahsan Rupai**

**Senior Lecturer**

**Department of Computer Science**

**Project Graph:**

**A blue and white graph with dots and lines

AI-generated content may be incorrect.**

**List of Objects:**

**22-47271-1**:

|  |  |  |
| --- | --- | --- |
| **SL#** | **Object ID** | **Object Name** |
|  | Obj-1 | Rain |
|  | Obj-2 | Cloud |
|  | Obj-3 | fullsky |
|  | Obj-4 | fullbottom |
|  | Obj-5 | moon |
|  | Obj-6 | sun |
|  | Obj-7 | campfire |
|  | Obj-8 | bench |
|  | Obj-9 | bridge |
|  | Obj-10 | road |
|  | Obj-11 | Clocktower |
|  | Obj-12 | leftcity |
|  | Obj-13 | rightcity |
|  | Obj-14 | lake |
|  | Obj-15 | car |
|  | Obj-16 | plane |
|  | Obj-17 | lamppost |
|  | Obj-18 | tree |
|  | Obj-19 | boat |

**22-47271-1:**

|  |  |  |
| --- | --- | --- |
| **SL#** | **Object Name** | **Function Name** |
|  | Rain | void rain() |
|  | Cloud | void Clouds(float xdiff, float ydiff,unsigned char r, unsigned char g, unsigned char b) |
|  | fullsky | void fullSky() |
|  | fullbottom | void fullBottom() |
|  | SUN | void sun(float radius, float xc, float yc, float r, float g, float b) |
|  | moon | void moon() |
|  | NIGHT | rNightsky() |
|  | campfire | void campfire() |
|  | bench | void bench\_beside\_campfire() |
|  | bridge | void bridge\_pillar() |
|  | road | void bridge\_road() |
|  | Clocktower | void drawClockTower(float x, float y) |
|  | leftcity | void left\_city() |
|  | rightcity | void right\_city() |
|  | Lake | void lake() |
|  | Car | void drawCar(float x, float y) |
|  | Plane | void drawPlane(float x, float y) |
|  | Lamppost | void drawLamppost(float x, float y) |
|  | Tree | void drawBigTree(float x, float y) |
|  | Boat | void boat() |

**List of Animation Functions:**

**22-47271-1:**

|  |  |  |  |
| --- | --- | --- | --- |
| **SL#** | **Animation Function ID** | **Animation Function** | **Object/Scene** |
|  | Anim-1 | void rain(){ | RAIN ANIMATION |
|  | Anim-2 | void moveCars() | CAR MOVING |
|  | Anim-3 | void planeCars() | PLANE MOVING |
|  | Anim-4 | void updateScene() | CLOCK ANIMATION |
|  | Anim-5 | void updateScene() | DAY NIGHT MOVING |
|  | Anim-6 | void lefttoright\_cloud() | CLOUD MOVING |
|  | Anim-7 |  |  |

**Contribution:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **ID** | **Implemented Functions** | **Implemented**  **Animation**  **Functions** | **Percentage of Contribution** |
| **MAHAMODUL HASAN TAJ** | **22-47271-1** | void rain()  void Clouds(float xdiff, float ydiff,unsigned char r, unsigned char g, unsigned char b)  void fullSky()  void fullBottom()  void sun(float radius, float xc, float yc, float r, float g, float b)  void moon()  rNightsky()  void campfire()  void bench\_beside\_campfire()  void bridge\_pillar()  void bridge\_road()  void drawClockTower(float x, float y)  void left\_city()  void right\_city()  void lake()  void drawCar(float x, float y)  void drawPlane(float x, float y)  void drawLamppost(float x, float y)  void drawBigTree(float x, float y)  void boat()  Void roadStrip() | void rain(){  void moveCars()  void planeCars()  void updateScene()  void updateScene()  void lefttoright\_cloud() | 25% |