

# DM2199 Computer Graphics Project

## Project objectives

- Conceptualize and code in a 3D environment
- Work in a team

## Project theme: Space

Propose an interactive Space scene

## Location

N1.507/N.508 (ignore anything that states M.615)

ID: n1507

Password: 7ocationN

## Supervisors

Name	Email	Phone
Tang Wen Sheng	tang_wen_sheng@nyp.edu.sg	6550-1770
Sim Tze Jan	sim_tze_jan@nyp.edu.sg	6550-1736
Victor Wee	victor_wee@nyp.edu.sg	6550-1859
Eric Sng	eric_sng@nyp.edu.sg	6550-1812
Alex Toh	alex_toh@nyp.edu.sg	6550-1814

## Ground rules

- 9am to 6pm, 15 Feb to 4 Mar 2016
- No food and drinks in lab
- Presentation on Fri, 4 Mar
- Arrange to meet your supervisor twice per week
- Version control must be used
- Hold daily SCRUM meetings of 10-15mins
- When in doubt, seek advice
- SP training: Thurs, 11 Feb, 12-3pm at M.615

## Proposal

Meet your supervisor by Monday, 15 Feb 2016 with your proposal

## Tools

Visual Studio 2013, SmartGIT, teamwork.com, Maya, Microsoft Office

## Requirements

- Determine the dimension of the scene e.g 1000 x 1000 x 1000
- Plan and design the space scene layout
- Plan the weekly task list, on teamwork.com (invite supervisor and Mr Tang)
- Decide on the activities in the scene (at least 1 difficult and 2 easy per person), examples:
  - Shooting asteroid or other ships
  - Mining minerals
  - Talking with aliens
  - Planting flag
  - Building space houses
  - Your own idea!
- Design up to 10 NPC characters (who do some random activities)
- Design 3 stories or scenarios to "play", examples:
  - Space race
  - Conquer and plant flag on moon
  - Build and launch a rocket (a.k.a. KSP)
  - Explore the planet
- Decide what character to play as: human, alien, robot, rover
- All Computer Graphics elements should be in (Light, camera, texture, skybox, controls, models, animations, text, etc.)
- Implement the project based on the plan
- Conduct a playtest, by inviting 10 students from other teams to test your game
- Proper Doxygen documentation and teamwork.com gantt chart and project report (in powerpoint)

## Marking criteria

Assessment item	Remarks	Component marks
[Marks given by supervisors]		[20]
Proposal	Week 0	5
Progress check 1	Week 1	5
Progress check 2	Week 2	5
Progress check 3	Week 3	5
[Marks given over 3 weeks]		[15]
Use of version control	Random checks	5

Use of SCRUM	Daily / random checks	5
Project management	teamwork.com and gantt chart	5
[Marks given on playtest]	Tuesday, 1 Mar 2016	[5]
Conduct a playtest	10 playtesters from other teams	5
[Marks given based on submission]	Thursday, 3 Mar 2016	[30]
Code & coding practice		10
Features		20
[Marks given on final day]	Friday, 4 Mar 2016	[30]
Final presentation & demo	Video, powerpoint, demo and Q&A	30
Bonus: User interface		Up to +5
Bonus: Audio (sounds, music)		Up to +5
Penalty: improper submission		Up to -20

## Guidelines

Week 0: Proposal and design of activities, scenarios, layout

Week 1: Scene layout with texture, skybox, OBJ and characters

Week 2: Activities, scenarios and UI

Week 3: Testing and polishing

Planning on following week tasks to be done every Friday

## Presentation (15 mins)

1. Video
2. Powerpoint
3. Demo
4. Q&A

## Submission

1. Video (< 1min) & 3 best screenshots
2. Project with source code, shaders, OBJ & images
3. Executable (Release) folder
4. Powerpoint with features, breakdown of tasklist and gantt chart
5. Documentation with Doxygen
6. Submission size: 100MB
7. Submission dateline: 2359, 3 Mar 2016, Thursday