

KDK College of Engineering Nagpur

Department of Information Technology

Subject : Gaming Architecture and Programming (BEIT802T)

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Unit-I Game Core Design & Initial Design

1. Which of the following is a not essential element of game –
- a) Rules
 - b) Goals
 - c) play
 - d) role

Answer: d

2. Gameplay consists of –
- a) challenges
 - b) actions
 - c) both a & b
 - d) none of above

Answer: c

3. Which of the following is a participatory form of entertainment?
- a) book
 - b) play
 - c) film
 - d) theatre

Answer: b

4. _____ and _____ are essential elements of playing games
- a) playing , pretending
 - b) playing , reading
 - c) assuming , pretending
 - d) none

Answer: a

5. Which of the following do not come with rule of how to play and goals to achieve
- a) puzzle
 - b) toys
 - c) games
 - d) none

Answer: b

6. Which of the following requires any input from a user?
- a) movie
 - b) game
 - c) both a & b
 - d) none

Answer: b

7. Chess ,basket ball & Tick-Tac-Toe comes under the category of _____ games
- a) Asymmetry
 - b) Symmetry
 - c) irregular
 - d) none

Answer: b

8. Which of the following is not the basic principles of game design –
- a) game design should be kept complex
 - b) Every game should be unique
 - c) Playing the game should be fun
 - d) all of mentioned

Answer: a

9. Which of the following is not a step to build the game concept-
- a) Get an idea
 - b) Create a goal
 - c) Write the design document
 - d) none

Answer: c

10. Which of the following is not a broad genre of games ?
- a) action

- b) non educational
- c) adventure
- d) puzzle

Answer: b

11. Which of the following is not Hardware abstraction ?

- a) Graphics
- b) sound
- c) game
- d) none

Answer: c

12. COTS stands for –

- a) Components off-the shelf
- b) commercial on-the shelf
- c) Components on the shelf
- d) none

Answer: a

13. In the four tier game architecture, physics, animation or graphics and AI lies in -

- a) Main tier
- b) Input Output Devices tier
- c) Device API tier
- d) Data tier

Answer: a

14. Gameplay specification is-

- a) Vision Document
- b) Basic Document
- c) Not a vision Document
- d) Non specific Document

Answer: a

15. Hardware Abstraction interface will act as a interface between

- a) Application and hardware
- b) LAN and WAN
- c) Hardware and peripherals
- d) Hardware and devices

Answer: a

16. Hard architecture of game design provides -

- a) Vertical solution
- b) horizontal solution
- c) Hybrid solution
- d) all

Answer: b

17. DirectX is a set of -

- a) System Programming
- b) Application Programming
- c) Compiler Programming
- d) Coding

Answer: b

18. Which of the following Steps is not included in Game development process

- a) Idea/ Story
- b) planning
- c) Technical requirement analysis
- d) testing

Answer: b

19. Who creates the code for game engine -

- a) AI programmer
- b) Graphics Programmer
- c) designer
- d) both a & b

Answer: d

20. People involved in component building are –

- a) Development team
- b) tool programmer
- c) project leader
- d) all of above

Answer: a

21. Which of the following is outcome of review phase-

- a) Bugs are fixed and feedback is sent to developers
- b) Artwork and manuals are finalized
- c) Technical specifications, project plan is prepared
- d) all of above

Answer: a

22. Games are developed in an iterative manner, since the risk is high therefore most of the times model chosen is

- a) waterfall
- b) spiral process model
- c) RAD process
- d) none

Answer: b

23. To develop the game of entirely new category, the model preferred is-

- a) waterfall
- b) build and fix
- c) prototype
- d) none

Answer: c

24. OpenGL is standard specification that is used to produce

- a) Only 2D computer graphics
- b) 2D and 3D computer graphics
- c) Only 3D computer graphics
- d) Both a and b

Answer: b

25. Unity is

- a) Single Platform
- b) Only for Desktop
- c) Cross Platform
- d) All of these

Answer: c

26. Tokens are

- a) Discrete Elements
- b) Manipulated Elements
- c) Direct Elements

d) Inverse Elements

Answer: a

Unit-II USE OF TECHNOLOGY

1. Blue-sky research is-
- a) Diversified Research
 - b) Undirected Research
 - c) Not dangerous
 - a) Deliberate Research

Answer: b

2. Different areas of technology research are-
- a) Research on existing products
 - b) Research on target market
 - c) Research on technology
 - d) All of these

Answer: d

3. All Application products deal with _____ whereas games deal with _____
- a) Usability,fun factor
 - b) Adaptability,usability
 - c) Fun factor,usability
 - d) Usability,adaptability

Answer: a

4. Prototype is the tier _____ of the development model
- a) Zero
 - b) One
 - c) Two
 - d) Three

Answer: a

5. Types of Kinematics are-
- a) Inverse Kinematics
 - b) Forward Kinematics
 - c) Both a and b
 - d) None of these

Answer: c

6. Which of the following is not a game design group?
- a) Architecture group
 - b) Game design group
 - c) Tools group
 - d) Machine group

Answer: d

7. Which of the following are Issues in game development?
- a) Platform Independence
 - b) Risk Reduction
 - c) Both a and b
 - d) None of these

Answer: c

8. Software factory methods are well suited for –
- a) Non uniform functionality
 - b) Common functionality
 - c) Different functionality
 - d) Virtual functionality

Answer: c

9. The common research sources to find the sources of information about anything are-
- a) Fan websites and blogs
 - b) DVD, CD downloads, pod cast
 - c) Magazines
 - d) All of above

Answer: c

10. Research Source used as strategy guides is
- a) Books and encyclopedias
 - b) Game hint books
 - c) Newspaper
 - d) None of above

Answer: b

11. The most important part of research journal is-
- a) Result
 - b) knowledge and experience
 - c) Both a & b
 - d) None of above

Answer: b

12. The language preferred to write game engine is-

- a) scripting language like Lua
- b) object language like C ++
- c) Both a & b
- d) None of above

Answer: b

13. The language preferred to write gameplay is -

- a) scripting language like Lua
- b) object language like C ++
- c) Both a & b
- d) None of above

Answer: a

14. Optimization technique related to game development includes –

- a) algorithm optimization
- b) code optimization
- c) Both a & b
- d) None of above

Answer: c

15. Which Optimization technique is mostly preferred in game development-

- a) algorithm optimization
- b) code optimization
- c) Both a & b
- d) None of above

Answer: a

16. Graphics Engine for the initial version of Quake was written by using-

- a) algorithm optimization
- b) code optimization
- c) Assembler level optimization
- d) None of above

Answer: c

17. The group responsible to investigate and prototype new technologies and include it in the library for use by all project is –

- a) Components group
- b) Project group
- c) Ancillary group
- d) Research group

Answer: d

18. The group responsible for sound , art , testing , marketing and management activities is-

- a) Components group
- b) Project group
- c) Ancillary group
- d) Research group

Answer: c

19. Which of the following is not the Principles followed for effective use of software factory methods ?
- a) Assemble programming group for each project according to its needs and make efficient use of resources.
 - b) Do not Understand the strength and weakness of each group
 - c) Allow knowledge transfer by moving the free members to another group which has more work
 - d) All of mentioned

Answer: b

20. The state pattern belongs to the category-
- a) Structural
 - b) Behavioral
 - c) Creational
 - d) None of above

Answer: b

21. Some common design patterns applicable to games are-
- a) Object factory Behavioral
 - b) Flyweight pattern
 - c) Chain of responsibility pattern
 - d) All of mentioned

Answer: d

Unit-III DEVELOPMENT

1. Which of the following are not the Seven golden principles
- a) Reuse
 - b) Documentation
 - c) Graphics Management
 - d) Fix errors early

Answer: c

2. Which of the following are not lead ballons

- a) Bad Management
- b) Feature creep
- c) Managing Task
- d) Coder Insularity

Answer: c

3. Which of the following is not type of bugs of game

- a) Class A
- b) Class B
- c) Class C
- d) Class D

Answer: d

4. An _____ data type is memory aligned.

- a) A-byte
- b) N-byte
- c) S-byte
- d) C-byte

Answer: b

5. Which of the following platform are used to deploy the game are

- a) Networking devices,Graphics card
- b) Monitor ,CPU, Chips
- c) PC, gaming console, handheld gaming console, cell phones, web
- d) None of these

Answer: c

6. Which are the tools of our game development

- a) Code
- b) Image editing program
- c) Sound
- d) All of these

Answer: d

7. Sprites is a _____ image animation that is integrated into a larger scene.

- a) One dimensional
- b) Three dimensional
- c) Two dimensional
- d) None

Answer: c

8. The tiers of game architecture

- a) Input output devices
- b) Device APIs
- c) Main and Data
- d) All of the above

Answer: d

9. The components of main loop are -

- a) Reading the players input
- b) Simulating the game world
- c) Both a and b
- d) None

Answer: c

10. Scene Graph :- A scene graph is a general data structure commonly used by _____ based graphics editing applications and modern computer games

- a) Vector
- b) Scalars
- c) Both a and b
- d) None

Answer: a

11. Scene graph arranges the logical and often spatial representation of a _____.

- a) Focus
- b) Graphical scene
- c) Play Activity
- d) Simulation

Answer: b

12. Which of the following is not a Development phases in a gameplay -

- a) Feasibility and Conceptualization
- b) Plan Technical architecture
- c) Integration , Complexity Level
- d) Including fun activity

Answer: d

13. Naming & coding convention are for-

- a) Classes, function & variables
- b) File & directory structure
- c) both
- d) None

Answer: c

14. Class A bugs are-
- a) Most severe
 - b) may not crash the bugs but affect the quality
 - c) minor bugs
 - d) All

Answer: a

15.) Find match of some of more popular handheld console
- | | |
|-------------|----------------------|
| 1.Nintendo | i) N-GATE |
| 2.Nokia | ii) i- Pod Touch |
| 3.Apple | iii) Zune HD |
| 4.Microsoft | iv) Gameboy color/DS |
- a) 1-i,2-iii,3-ii,4-iv
 - b) 1-iv,2-i,3-ii,4-iii
 - c) 1-iii,2-iv,3-i,4-ii
 - d) 1-ii,2-i,3-iv,4-iii

Answer: b

Unit-IV DESIGN PRACTICES

1. VRAM stands for
- a) Virtual random access memory
 - b) Vertex random access memory
 - c) Video random access memory
 - d) Versatile random access memory

Answer: c

2. Heap memory allocation is also known as
- a) Dynamic memory allocation
 - b) Sequence memory allocation
 - c) System memory allocation
 - d) Main memory allocation

Answer: a

3. RPC stands for
- a) Request procedural call
 - b) Remote Procedural call
 - c) Right Processing call
 - d) None of these

Answer: b

4. Source control also known as
- a) revision control
 - b) version control
 - c) Both a and b
 - d) None

Answer: c

5. CVS stands for
- a) Concurrent Version System
 - b) Concurrent Vertex System
 - c) Complex Video System
 - d) Complex Version System

Answer: d

6. Hot keys are the keys on the keyboard which fire certain events on the _____ game.
- a) Monobehaviour
 - b) Application
 - c) Video
 - d) Outdoor

Answer: b

7. Stack memory store data in the
- a) FIFO
 - b) LIFO
 - c) FILO
 - d) LILO

Answer: b

8. Source control system provides the functionality involves
- a) Backup or Restore
 - b) Synchronization and Revert
 - c) Follow changes and Sand Boxing
 - d) All of these

Answer: d

9. Which of the following can be control properties
- a) Hotkeys
 - b) Tooltips
 - c) Context-sensitive help
 - d) All of the above

Answer: d

10. Screen is the ____ of user interface element in a game.
- a) Highest level
 - b) Lowest level
 - c) Middle level
 - d) Small level

Answer: a

11. Subversion is the
- a) Vision control system
 - b) Revision control system
 - c) Application control system
 - d) Context control system

Answer: b

12. Standard template library does not provides
- a) Containers
 - b) Functions
 - c) Iterators
 - d) Garbage Value

Answer: d

13. The Resource File Generator converts which files to common language runtime binary resources
- a) .txt files
 - b) .resx
 - c) XML-based resource format
 - d) All

Answer: d

UNIT-V 2D DRAWING AND DIRECTX

1. Direct 2D distinguishes between __ and __ objects
- a) Filling, Drawing
 - b) Graphics, Sound
 - c) Colouring, Element
 - d) 3D, 2D

Answer: d

2. _____ images are stored digitally using a small number of standardized graphics file format
- a) Pixel
 - b) Graphic
 - c) Object
 - d) Sprite

Answer: b

3. Which of the following is well suited for logo design and icons?
- a) Vector graphics
 - b) Bitmap
 - c) AI
 - d) Vertex

Answer: a

4. What are also referred to as raster or pixel based files
- a) Bitmap
 - b) Vector
 - c) JPEG
 - d) MPG

Answer: a

5. The base class from which every unity script derives
- a) Multibehaviour
 - b) Monobehaviour
 - c) Mongobehaviour
 - d) Meshbehaviour

Answer: b

6. What is the overall flow control for the entire game program
- a) Iteration
 - b) Script
 - c) Program
 - d) Game loop

Answer: d

7. Which of the following language is not included in game scripting language
- a) Java
 - b) Ruby
 - c) C
 - d) SQL

Answer: c

8. DirectDraw is an API that used to be a part of ____ DirectX API
- a) Epic games
 - b) Microsoft
 - c) Sony
 - d) Apple

Answer: b

9. Chroma key compositing is a technique for compositing _____ images together
- a) Single
 - b) Double
 - c) Two
 - d) Multi

Answer: c

10. Methods of drawing text are
- a) pre-draw entire character set
 - b) use fonts to draw text
 - c) Both a and b
 - d) None

Answer: c

11. Which of the following is not a graphics file format
- a) JPG/JPEG
 - b) PNG
 - c) BMP
 - d) GUI

Answer: d

UNIT-VI LOADING AND CACHING GAME RESOURCES

3D GRAPHICS AND 3D ENGINES

1. MIDI stands for
- a) Moving Instrument digital interface
 - b) Musical Instrument digital interface
 - c) Magical instrument digital interface
 - d) Middleware instrument digital interface

Answer: b

2. Which of the following are not the audio formats
- a) EPS
 - b) WAV
 - c) MP3
 - d) MIDI

Answer: a

3. Inputs required for the 3D graphics pipeline
- a) Geometry
 - b) Material
 - c) Textures
 - d) All of these

Answer: d

4. Lossy techniques provide _____ when compared to lossless techniques.
- a) lower compression ratios
 - b) much higher compression ratios
 - c) similar compression ratios
 - d) none of the mentioned

Answer: b

5. A complete screen, or the set of all the elements representing it.
- a) MIDI
 - b) Storyboard
 - c) GUI
 - d) Frame

Answer: d

e)

6. Which of the following is audio file format
- a) Uncompressed
 - b) Lossless compression
 - c) Lossy compression
 - d) All of the above

Answer: d

7. Only assets that are in the resources folder can be accessed through
- a) Resources_load()
 - b) Resources_select()
 - c) Resources_upload()

d) Resources_open()

Answer: a

8. Which of these terms is a type of data compression

- a) Resolution
- b) Inputing
- c) Zipping
- d) Caching

Answer: c

9. A graphics pipeline is divided into

- a) Application
- b) Geometry
- c) Rasterization
- d) All of the above

Answer: d

10. A scene graph is a dynamic data structure similar to a

- a) Stack
- b) Tree
- c) Queue
- d) List

Answer: b

11. Inputs required for the 3D graphics pipeline are

- a) Geometry, Material
- b) Textures
- c) Lights, Camera
- d) All of the above

Answer: d

12. Lossy compression are created for human

- a) Perception
- b) Compiling
- c) Preface
- d) Ignorance

Answer: a

13. Which of the following are popular 3D middleware available in the market for game development?

- a. Unreal engine
- b. ICAP
- c. renderware
- d. id Tech 4

Answer: a,c,d

14. Doom 3 engine is written in-

- a) Java
- b) Lua
- c) C++
- d) C#

Answer: c

15. Which of the following is not an operation performed by 3D graphics pipeline?

- a) Zooming
- b) Lighting
- c) Clipping
- d) Transformation

Answer: a

