



**Tools to use in an information  
technology class**

**and best of all they are FREE!**

**2016 ASCUE**



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# PURDUE

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## POLYTECHNIC

### Statewide System





# VirtualBox



# VirtualBox



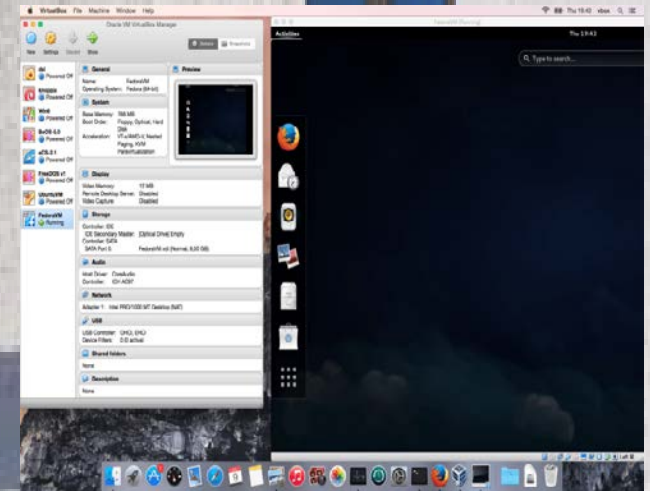
- Virtual machine software
  - Emulation of a computer that can be managed by the user
  - VirtualBox
    - Open source purchased by Oracle
    - X86 and AMD64/Intel64 product
    - Runs on Windows, Linux, Mac OS, Solaris
    - Supports large number guest OS including Windows, Linux and Solaris

# VirtualBox



- Advantages/Disadvantages
- Replaces VMware
- Used in CNIT 487 Database Administration
- Can be downloaded at:

<https://www.virtualbox.org/>



# GameMaker



# GameMaker

- Game engine
- GameMaker Studio
  - 2D Game Engine
  - From Playtech
  - Can be used to make games for
    - Windows
    - Mac OS X
    - Linux
    - Android
    - iOS
    - Windows Phone
    - Xbox One





# GameMaker

- Advantages/Disadvantages
- Replace Unity 5
- CNIT 399 Game Development
- Available at:

<http://www.yoyogames.com/gamemaker>



# Oracle SQL Developer

Oracle  
SQL Developer



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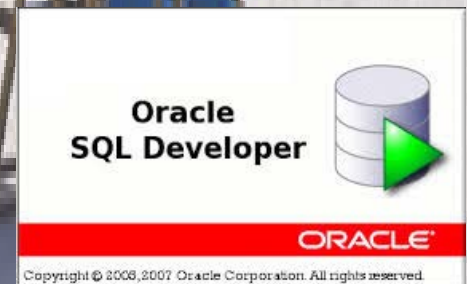


SQL

ORACLE®

# Oracle SQL Developer

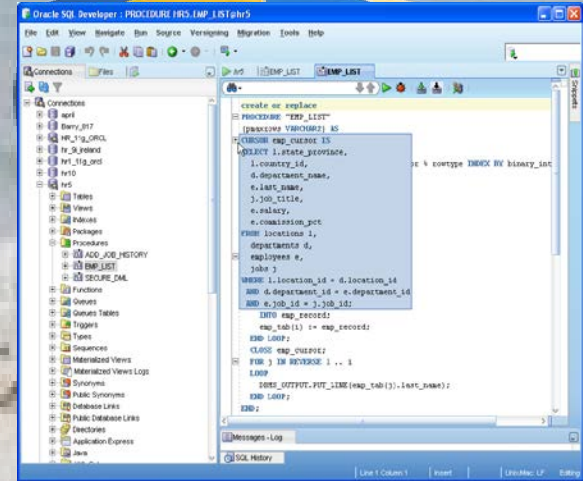
- Integrated Development Environment (IDE)
- SQL Developer
  - Used by developers/DBAs
  - Oracle GUI tool
    - Can migrate third party databases including
      - Access
      - SQL Server
      - DB2
    - Edit and debug code
    - DBA capabilities like backup/recovery



# Oracle SQL Developer

- Advantages/Disadvantages
- Replaces SQL\*Plus and TOAD
- Used in:
  - CNIT 272 Database Fundamentals
  - CNIT 372 Database Programming
  - CNIT 392 Enterprise Data Management
- Can be downloaded at:

<https://www.oracle.com/downloads/index.html>



# Unreal Engine 4



# Unreal Engine 4

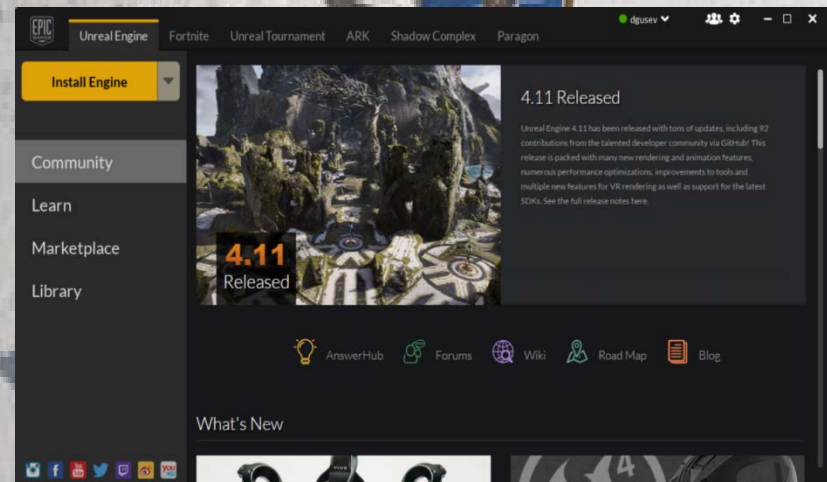
- Game engine
- Unreal Engine 4
  - 3D Game Engine
  - From Epic Games
  - As of March 2015 free not only to schools/students but for individuals
  - Unreal Engine 4.11 released March 2016
    - Multiple new features including VR rendering



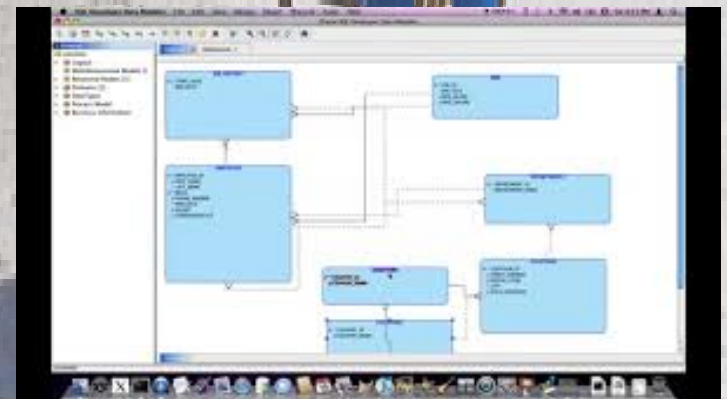
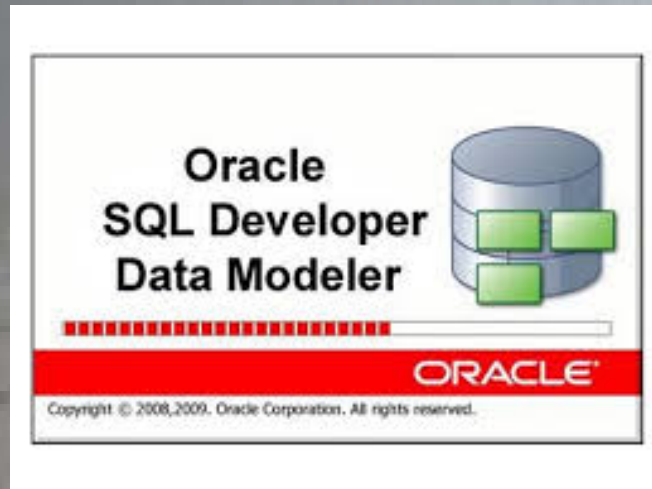
# Unreal Engine 4

- Advantages/Disadvantages
- Can replace Unity
- Used in:
  - CNIT 399 Game Development
  - Game Development summer Camp
- Downloaded free at:

<https://www.unrealengine.com/>



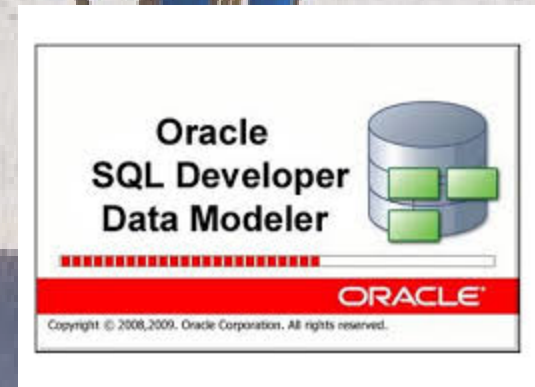
# Oracle SQL Developer Data Modeler





# Oracle SQL Developer Data Modeler

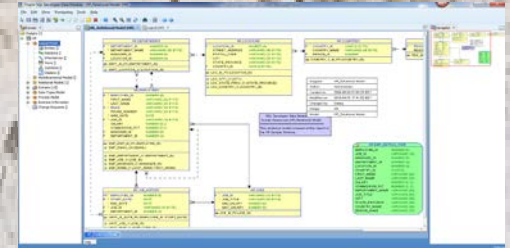
- CASE tool
- SQL Developer Data Modeler
  - Used by developers/designers
  - Oracle GUI tool
    - Data Flow Diagrams (DFD)
    - Entity Relationship Diagrams (ERD)
    - Forward engineer a database
    - Reverse engineer a database



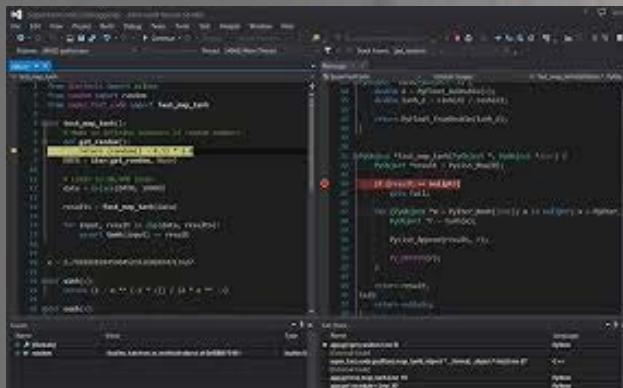
# Oracle SQL Developer Data Modeler

- Advantages/Disadvantages
- Replaces Oracle Designer and Microsoft Visio
- Used in:
  - CNIT 272 Database Fundamentals
  - CNIT 372 Database Programming
  - CNIT 392 Enterprise Data Management
- Can be downloaded at:


<https://www.oracle.com/downloads/index.html>



# Microsoft Visual Studio 2015 Community Edition

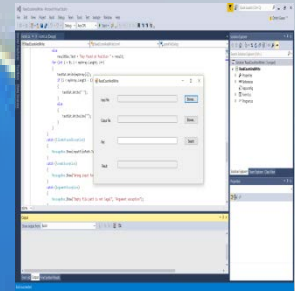


# Microsoft Visual Studio 2015 Community Edition



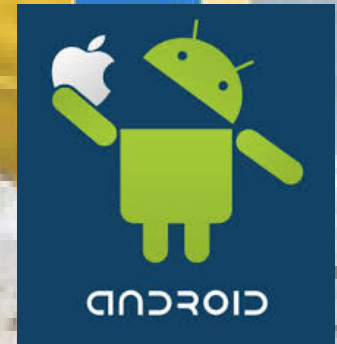
- IDE
- Visual Studio 2015 Community Edition
  - Used by developers
  - Microsoft tool
    - Tools for cross-platform development
    - Third-party (Xamarin) tools for C# development for Android and Windows phones
    - Instruments for Profile Guided Optimization (PGO) Reverse engineer a database
    - Tools for Web development and advanced debugging
    - C#, Visual Basic, F#, C++, JavaScript, TypeScript, and Python

# Microsoft Visual Studio 2015 Community Edition



- Advantages/Disadvantages
- Replaces Microsoft Express Edition and Microsoft Visual Studio 2013 Professional Edition
- Used in:
  - CNIT 155 Introduction to Software Development Concepts
  - CNIT 255 Object-Oriented Programming Introduction Database Programming
- Can be downloaded at:  
<https://www.visualstudio.com/products/visual-studio-community-vs>

# Android Studio



# Android Studio

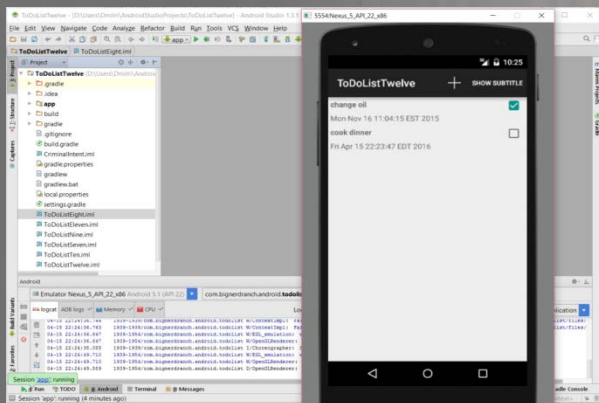
- IDE
- Android Studio
  - Used by developers
  - Developed by Google
    - First stable build December 2014



# Android Studio

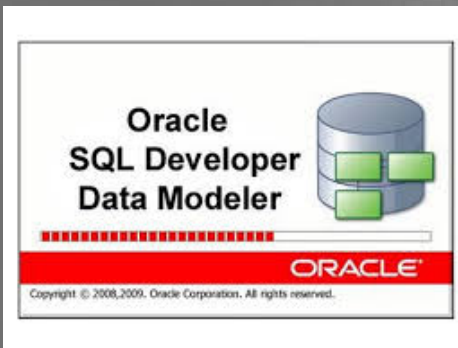
- Replaces Android Development Tools (ADT)
- Used in:
  - CNIT 355 Software Development for Mobile Computers
- Can be downloaded at:

<https://developer.android.com/studio/intro/index.html>





# Summary



Questions?

