System Life Cycle

Systems Development Life Cycle

Objectives

- To understand what a system life cycle is
- How to create a list of SMART objectives for the Analysis from research.

Spelling Words

Cycle

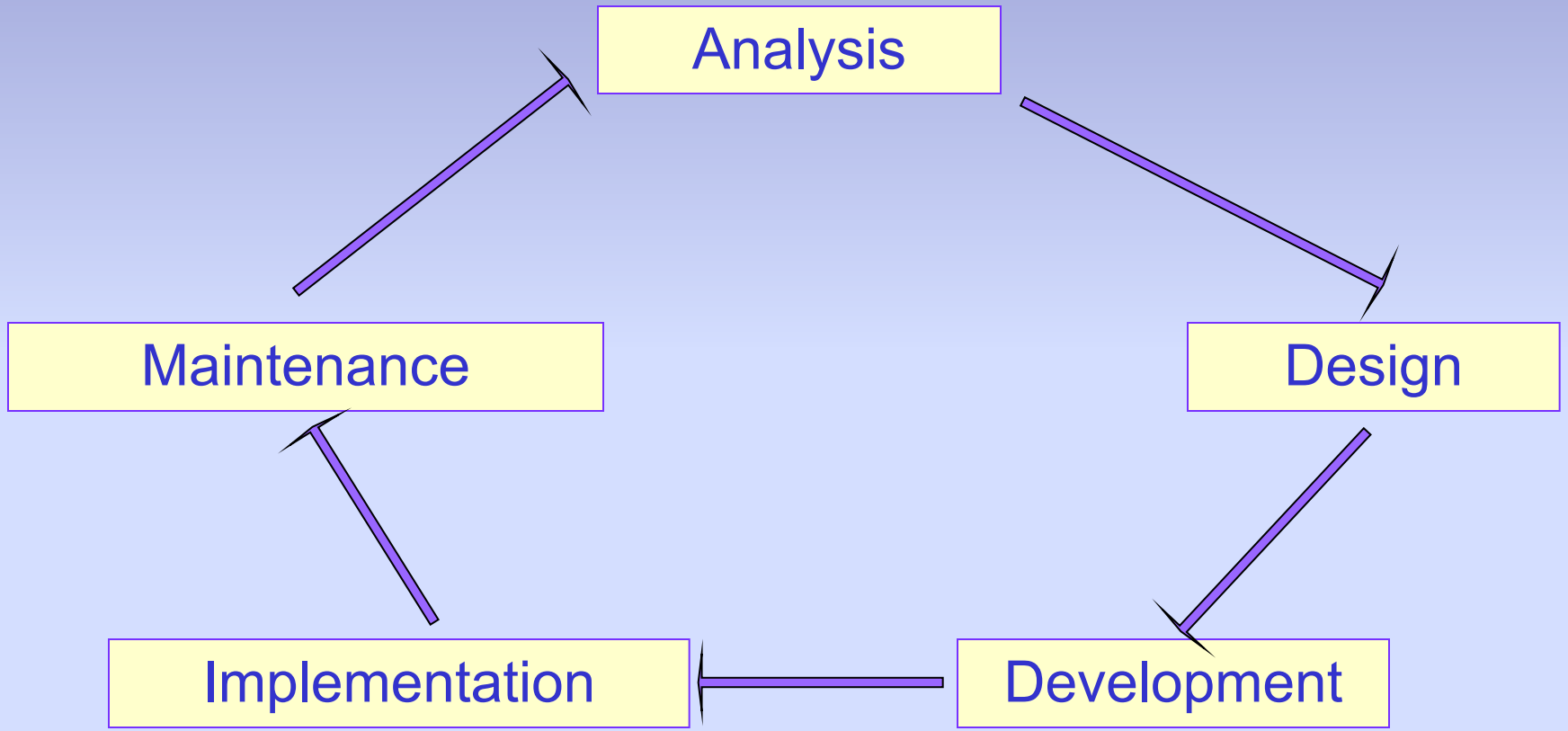
Cascade

Spiral

Advantage

Prototyping

The System Life Cycle



System Development Life Cycle

When creating software, hardware, or any kind of product you will go through several stages, we define these stages in the System Development Life Cycle.

The Cycle

- Any System Development Life Cycle it should result in a high quality system that meets or exceeds customer expectations.

- It must be finished within time and cost limits, works effectively and efficiently and is inexpensive to maintain and cost-effective to improve upon game.

Example

We are going to look at how a computer games firm, 'Electronic Crafts', would look at making a new computer game.

Cycle

As this is called the Systems Development Life Cycle, it's quite usual that a company will then go back to the analysis once it has evaluated a product.

Think about some of the software products that you use, they probably have a version number or a year, and reuse code and designs from previous years

With the Systems Development Life Cycle, you never just quit, you are always looking at ways to improve or surpass what you have created.

Example, Microsoft Flight Simulator…

Systems Development Life Cycle: Analysis

When you are given any problem you should start off by finding out about the problem and getting an idea of what you will make to solve the problem by:

- A detailed look at current systems
- Establish the objectives of the new system

Game Design

Electronic Crafts wants to create a game that will sell successfully, so it needs to see what the market wants to buy and what their current interests are. It will gather data on:

- How previous similar products have sold (market data)
- What customers are interested in (questionnaires and interviews)
- Whether it has any code that could be adapted or reused (internal data)
- Feasibility of making any proposed game (is it possible within the time, technical, cost and personnel limits to make the game?)

SMART

Once it has done its research, it will create a document listing **objectives** for the new system.

These objectives must be SMART so that we can check if the system has been created successfully.

SMART: Give students handouts

Letter	Major Term
S	Specific
M	Measurable
A	Attainable
R	Relevant
T	Time-bound

Student Activity Game design

Question 1

- **Answer :**
- S - Yes
- M - Yes, Yes you could demonstrate this
- A - Yes, this should be possible
- R - Yes, this is core to playing the game
- T - Yes, this should be achievable within the time given

Question 2

Answer :

- S - Yes
- M - Yes, Yes you could demonstrate this
- A - Yes, this should be possible
- R - **No**, this is very unusual, why would they need it? Unless the users specifically ask for it
- T - Yes, this should be achievable within the time given

Question 3

Answer :

- S - Yes
- M - Yes, you could demonstrate this
- A - **Maybe**, this might be possible, but why are you writing your own code, can't you re-use code from a previous version
- R - Yes, the game will need graphics
- T - **No**, doing this within a year time limit is too difficult.

Question 4

- **Answer :**
- S - **No'*, what does 'really, really,* really** mean? Be more specific, e.g. 80% of test users should rate it outstanding
- M - **No**, see above
- A - **Maybe**, but how do you measure it?
- R - Yes, you're aiming to be the best
- T - Yes, you're hoping to make a top notch game within the time given

Question 5: Answer