FUNDAMENTAL OF MULTIMEDIA MULTIMEDIA SOFTWARE DEVELOPMENT LIFECYCLE (MSDLC)

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Communitising Technology

Chapter Description

- Expected Outcomes

- In this chapter, Student will be able

- To understand the multimedia Software development Lifecycle
- To develop the multimedia software based on the development flow.

- References

- Tay Vaughan. Multimedia: Making It Work, Ninth Edition. Mc Graw Hill. 2014. ISBN-13: 978-0071832885.
- Zhe-Nian Li, Mark S. Drew.S & Jiangchuan Liu. Fundamentals of Multimedia (Texts in Computer Science) 2nd ed. 2014 Edition. Springer Publication. 2014. ISBN-13: 978-3319052892.
- Khalid Sayood. Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) 4th Edition. Elsevier. 2012 ISBN-13: 978-0124157965.
- Savage, T.M., Vogel, K.E. An Introduction to Digital Multimedia 2nd ed.. 2013. Jones & Bartlett Learning   ASIN: B00LZM6ESY.
- Parag Havaldar, Gerard Medioni. Multimedia Systems: Algorithms, Standards, and Industry Practices (Advanced Topics) 1st Edition. Cengage Learning. 2011. ISBN-13: 978-1418835941
- *Lili Ann, Dr. . Multimedia Sodtware Development Lifecycle. www.rqc.edu.my/images/elibrary/Multimedia/ development.pp*

INTRODUCTION

- Multimedia Software Development Lifecycle (MSDLC) is a flow of phases that have to be followed by multimedia software developer.

- Its started from analysis until maintenance part similar as other software development lifecycle

- MSDLC more focusing in designing the flow and interface of multimedia to fulfill the user need.

Why Multimedia software life cycle?

- Cost estimation
- Many real world projects have cost overruns
- Many projects fail
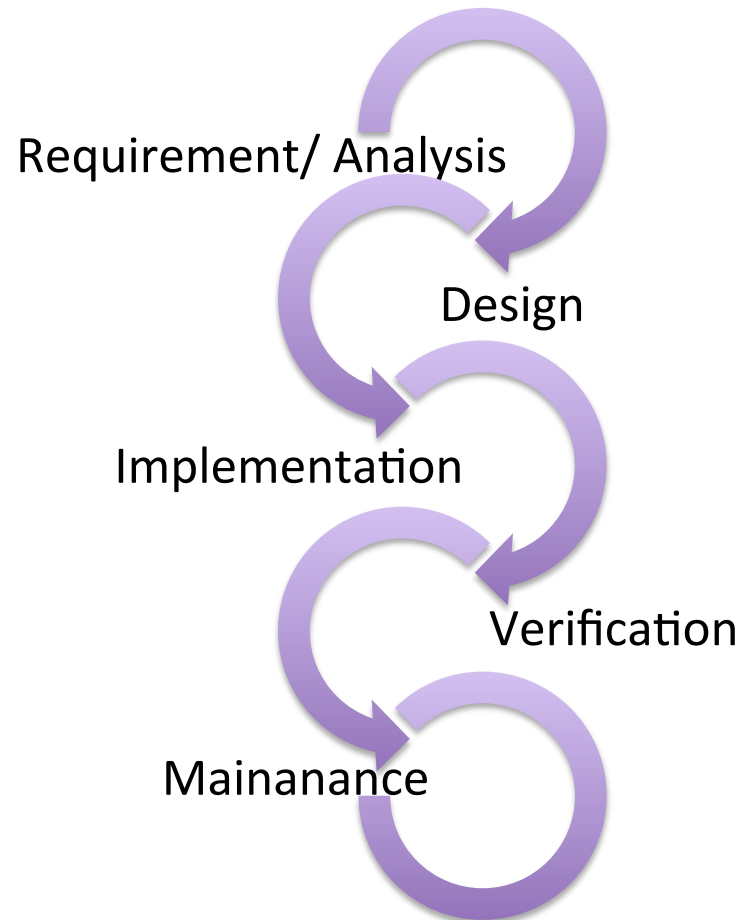- Software engineering seeks to find ways to build systems that are on time and within budget

INTRODUCTION

- There are a few model of MSDLC such as ADDIE, ASSURE as well as common SDLC such as Waterfall, SDLC and AGILE

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Classic waterfall life cycle

Requirement/ Analysis

Design

Implementation

Verification

Mainanance

ADDIE life cycle

ANALYZE

DESIGN

DEVELOP

IMPLEMENTATION

EVALUATION

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ASSURE life cycle

- A • Analyze Learner

- S • State Objectives

- S • Select Media & Material

- U • Utilize Material

- R • Require Learner Participation

- E • Evaluation/Review
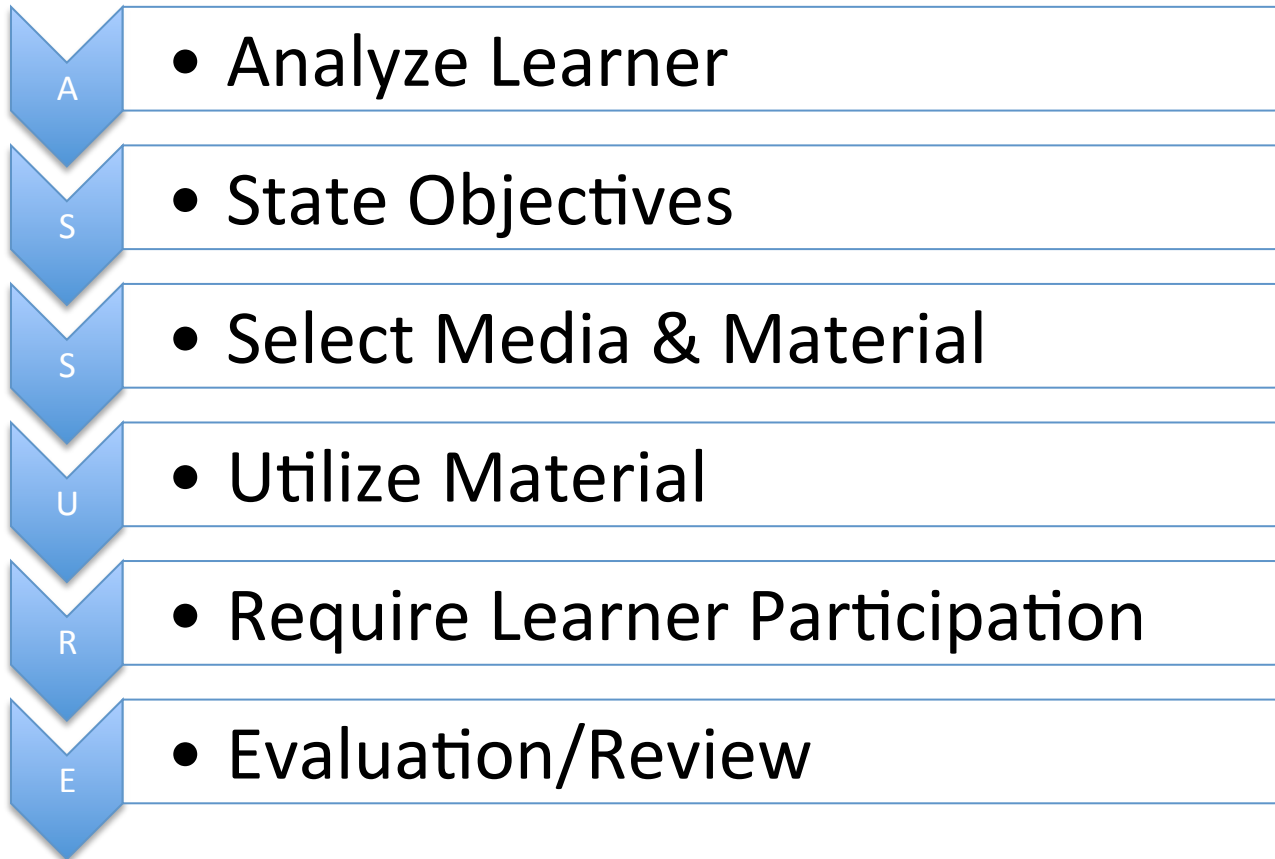
Rapid Prototyping life cycle
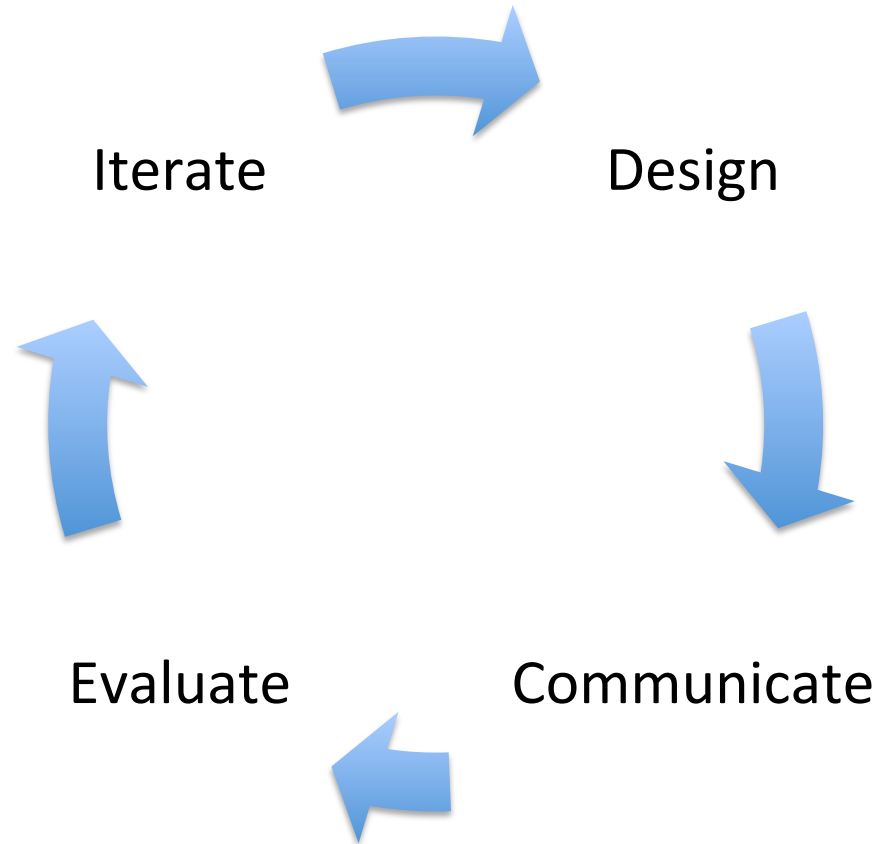
Iterate

Design

Evaluate

Communicate

ANALYZE

- User Requirement

- Budget

- Objectives

DESIGN

- Design
  - Brainstorming
  - Work Breakdown Structure
  - Dialogue Diagram
  - Storyboarding
  - Flowchart design
  - Paper design
  - Prototyping
  - User testing

DEVELOPMENT

- Development
  - Media production
  - Programming
  - Debugging
  - Final debugging
  - Authoring

IMPLEMENTATION

- Ready to be used by the user
- User Manual

EVALUATION

- Alpha Testing

- Beta Testing

- Usability testing

- Using questionnaire, observation and interview

- Use form