

An Introduction to Software Engineering



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Objectives



- At the end of today's session, the student is expected to:
 - Define what a software is
 - Identify components of a software

Software Engineering



- Two important words:
 - Software
 - Engineering
- What do we mean by **software**?
- By **engineering**?

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IBM GSIS



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[GSIS, IBM sue each other over 'defective' software | ABS-CBN News](#)

[www.abs-cbnnews.com/.../gsis-ibm-sue-each-...](#) - Isalin ang pahinang ito

3 Jun 2009 – MANILA - The ongoing dispute between the Government Service Insurance System (**GSIS**) and **IBM** Philippines over an alleged defective ...

[A Message to our Valued Clients and Partners in the Philippines - IBM](#)

[www-07.ibm.com/ph/statement/](#) - Isalin ang pahinang ito

5 Jul 2009 – Unfortunately, due to a series of sustained public attacks by the **GSIS**, **IBM** Philippines feels compelled to issue a clarification of the key facts ...


[GSIS mulls settlement with IBM over faulty software | The Manila ...](#)

[www.mb.com.ph/node/293741/g](#) - Isalin ang pahinang ito



19 Dec 2010 – State-run Government Service Insurance System (**GSIS**) said that it is exploring a potential settlement with the local unit of computer giant **IBM** ...

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[SC affirms Comelec purchase of PCOS machines | Inquirer News](#)

[newsinfo.inquirer.net/.../sc-affirms-comelec-p...](#) - Isalin ang pahinang ito

23 Oct 2012 – The Supreme Court affirmed with finality the validity of the Commission on Elections' (Comelec) P1.8 billion purchase of precinct count optical ...

[PCOS machines | Inquirer News](#)

[newsinfo.inquirer.net/tag/pcos-machines](#) - Isalin ang pahinang ito

The Commission on Elections (Comelec) will set aside P112 million for the yearly payment for a storage site for its precinct count optical scan (**PCOS**) machines, ...

[Comelec to set aside P112M for PCOS machines storage | Inquirer ...](#)

[newsinfo.inquirer.net/.../comelec-to-set-aside-...](#) - Isalin ang pahinang ito

2 Jul 2012 – The Commission on Elections (Comelec) will set aside P112 million for the yearly payment for a storage site for its precinct count optical scan ...

[Mga Larawan para kay pcos machine](#) - lulat ang mga larawan



['PCOS machines vulnerable to exploitation'](#)

[www.manilatimes.net/.../25139-pcos-machines...](#) - Isalin ang pahinang ito

19 Jun 2012 – AUDITABLE meta-data, digital signature, data stored in writable compact flash (CF) cards, a voter's receipt showing that one's vote has been ...

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What a software is



- According to wikipedia.org,
“**Computer software**, or just **software**, is a collection of computer programs and related data that provides the instructions for telling a computer what to do and how to do it.

Software refers to one or more computer programs and data held in the storage of the computer. In other words, software is a set of programs, procedures, algorithms and its documentation concerned with the operation of a data processing system”.

What a software is



- According to Pressman
 - Computer software is the product that software professionals build and then support over the long term. It encompasses programs that execute within a computer of any size and architecture, content that is presented as computer programs execute, and descriptive information in both hard copy and virtual forms that encompass virtually any electronic media.

What a software is



- Computer programs and associated documents such as requirements, design models and user manuals.
- Software = computer program + documentation

Software Types



- System Software
- Application Software

Software vs. App



- What's the differences?

Defining a software



- Every book author or Software Engineer would have his/her own definition for a software and SE

Defining a software



- Software is developed or engineered; it is not manufactured in the classical sense.
- Software doesn't "wear out".
- Although the industry is moving toward component-based construction, most software continues to be custom built.

References



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- **Saleh, Kassem A.** Software Engineering. J Ross Publishing. ISBN-13: 978-981-3419-27-0. 2009 Philippine reprint 2010, Cengage Learning Asia Pte Ltd
- **Sommerville, Ian.** Software Engineering (9th ed).