TEMPLE UNIVERSITY

Honors Digital Systems

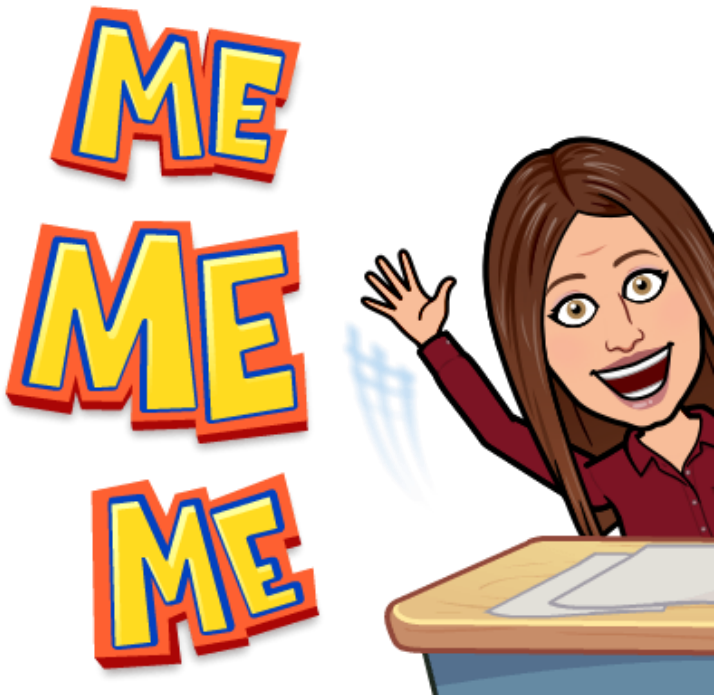
1.1 Introduction to MIS

FOX MIS

Welcome!

Fall 2022

FOX
MIS



- Education: Temple: BBA, MBA, Ed.D
- Background: Marketing with a slide into Information Systems
- Consulting Work: PowerCAMPUS, Salesforce, Concur, Banner
- Academics: Director, MS-Digital Innovation in Marketing, Intro to MIS, UX, Data Analytics, Data Science, Business Intelligence, Digital Innovation Capstone, Managing with Data
- Certification: Google Analytics, Adobe

Relevant Info:

AMYL@TEMPLE.EDU

SPEAKMAN 209G

215-204-3196

OFFICE HOURS

M/W: 11-12

BY APPOINTMENT


MARCH MADNESS


91


KWIK-E-MART
NOVELTIES

ITA – Brianna Anderson

- Senior MIS and Marketing dual major
- Hometown: Plano, Texas
- Fun Fact: I am a big foodie and love exploring restaurants around the city!
- *ITA for MIS 2901, MIS 2101, and MIS 3535*
- I work at the MIS Front Desk and am also a PRO Point Ambassador
  - If you have questions about becoming an MIS major/PRO points you can always reach out :)
- Office Hours: by appointment
- Email: bri.anderson@temple.edu

“Tell me and I forget. Teach me and I remember. Involve me and I learn.”

- Benjamin Franklin

Managing Expectations

- **This class is unique!**
- **We will work through challenges together…plan on it!**
- **You will find the class engaging and fun!**
- **You will acquire knowledge and skills that you will use in future classes and your career!!!**

Course Highlights

- **Systems Analysis**
- **Process Mapping (Modeling with swim lanes & entity relationship diagrams)**
- **Digital Product Management**
- **Information Systems CRM & ERP, Data Analytics & SCM**
- **Platforms & Digital Business models, including API's**
- **Cyber security and the Enterprise plus AI**
- **Programming including JavaScript, HTML & CSS**

Course Objectives

- Explore the systems which organizations use to create their digital products
- Explore the platforms which these digital systems are built upon
- Explore the API ecosystems by which systems extend their reach and capability.
- Discuss cyber security including risks & responses surrounding digital products
- Introduction to the creation of software
- Learning the basics of programming in JavaScript

Graded Components

Component	Percentage
In-Class Activities & Worksheets (approximately 17) * must be present in class to earn credit – no exceptions!	10%
Learn IT! Assignments ** no late assignments accepted – no exceptions!	25%
Exam #1 (50 minutes)	20%
Exam #2 (50 minutes)	20%
Exam #3 (50 minutes – held during finals week)	20%
Honors Technology Research Project	5%

*In-Class activities must be submitted while in class.

**Completed assignments will not be returned in class. Grades will be posted to the gradebook. Please note that two weeks after a grade is posted, the grade will be considered “final.”

Extra Credit Opportunity

- **Onetime opportunity!**
- **Improve your final score**
- **Interact with an AI-powered interviewer.**
- **Practice your interview skills**
- **Includes a chance to win $20 gift card too!**

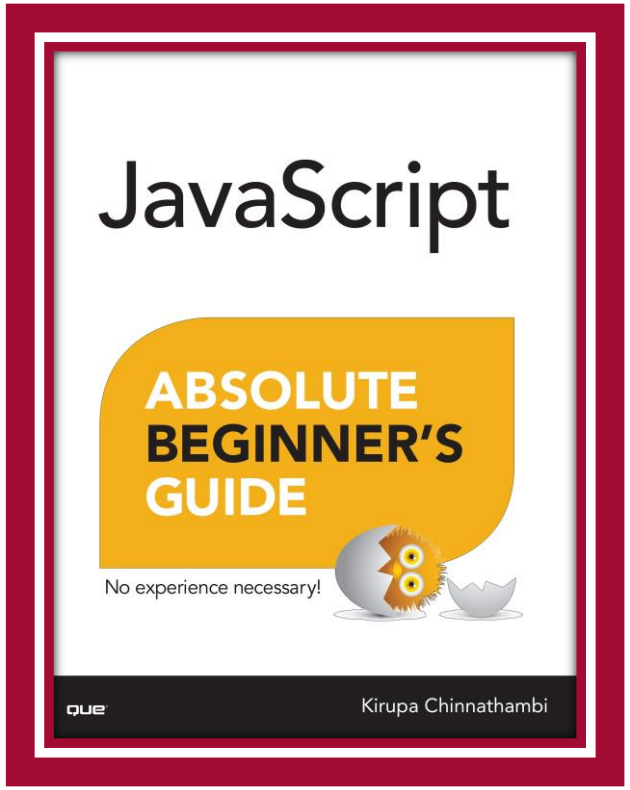
Readings & Videos – Part 1

- **No required texts the first 2/3's of the semester!**

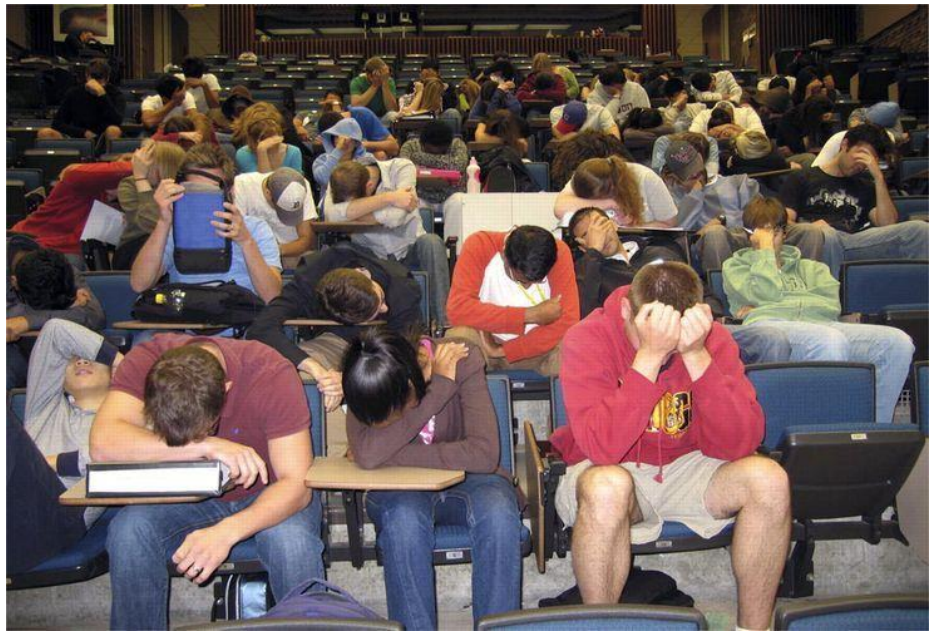
- **Engaging collection**
- **Current content**
- **Available for Free!!!**

Readings & Videos – Part 2

- **JavaScript**
  - Create simple JavaScript programs
  - Prompt users for input
  - Utilize loops
  - Process Information
  - **JavaScript Absolute Beginner's Guide, 2nd Edition**



Lecture vs. Activities



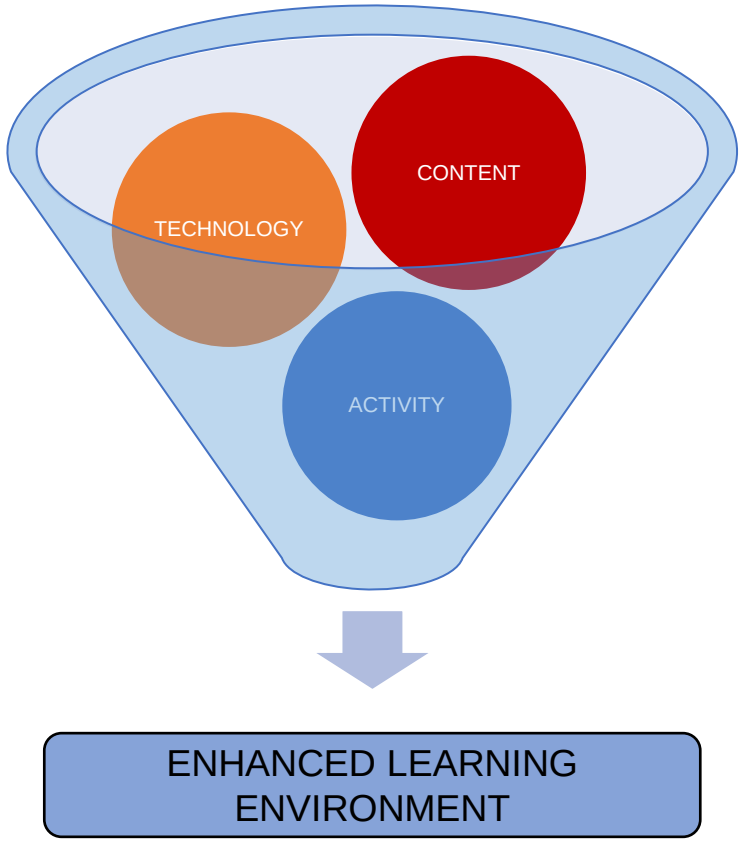
Source: https://www.theodysseyonline.com/11-things-college-lecture-hall

- 3 Hours of zzzzzzzzz's

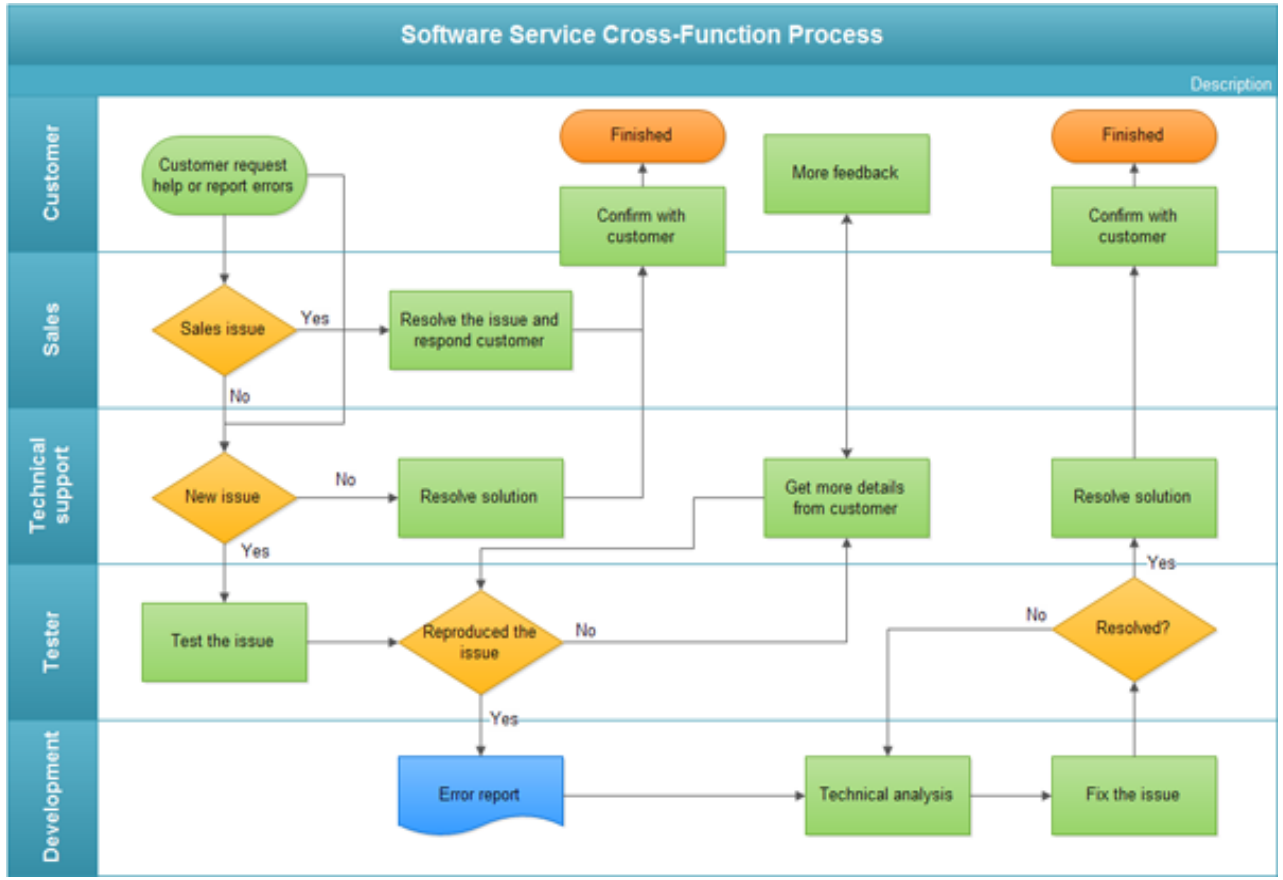
- 1 Hour Discussion
- 2 Hours of Activity

Active Learning Components

The Active Learning Funnel

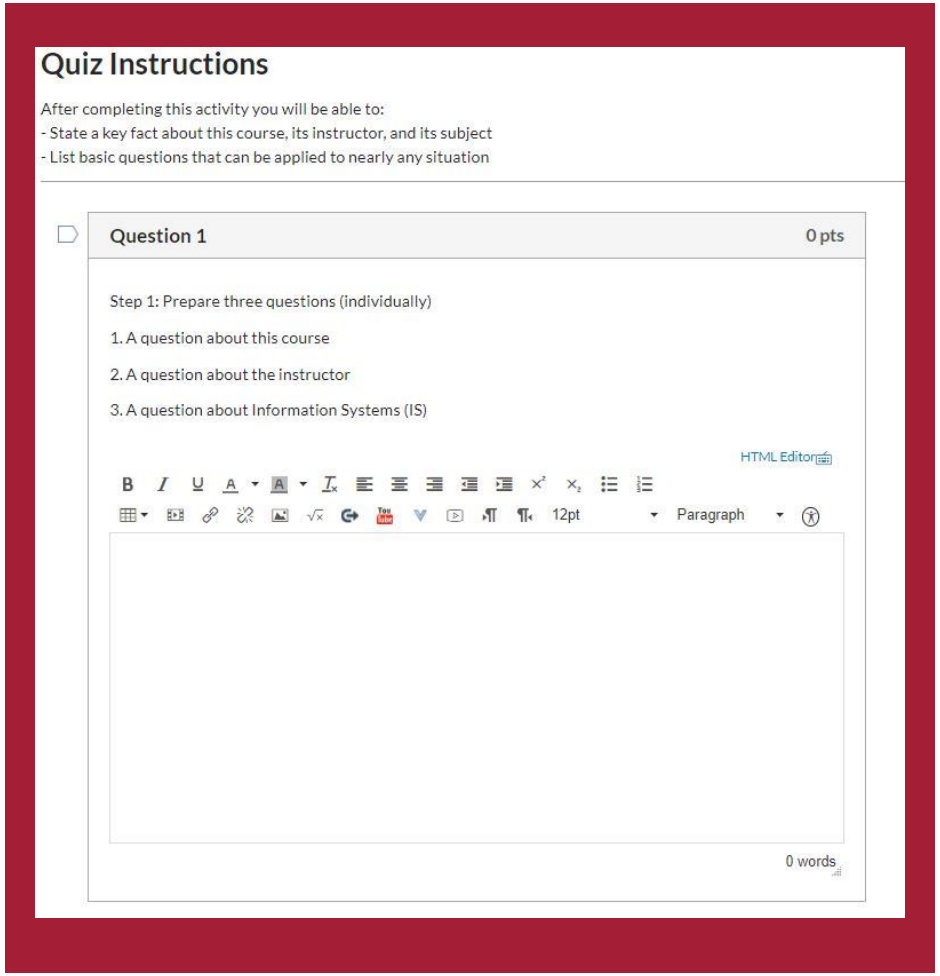


The In-class Activity



- **Process Diagrams**
  - **Swim lane diagram**
- **Real life scenarios**
- **Knowledge Application**
- **Problem Solve**
- **Synthesize Solutions**

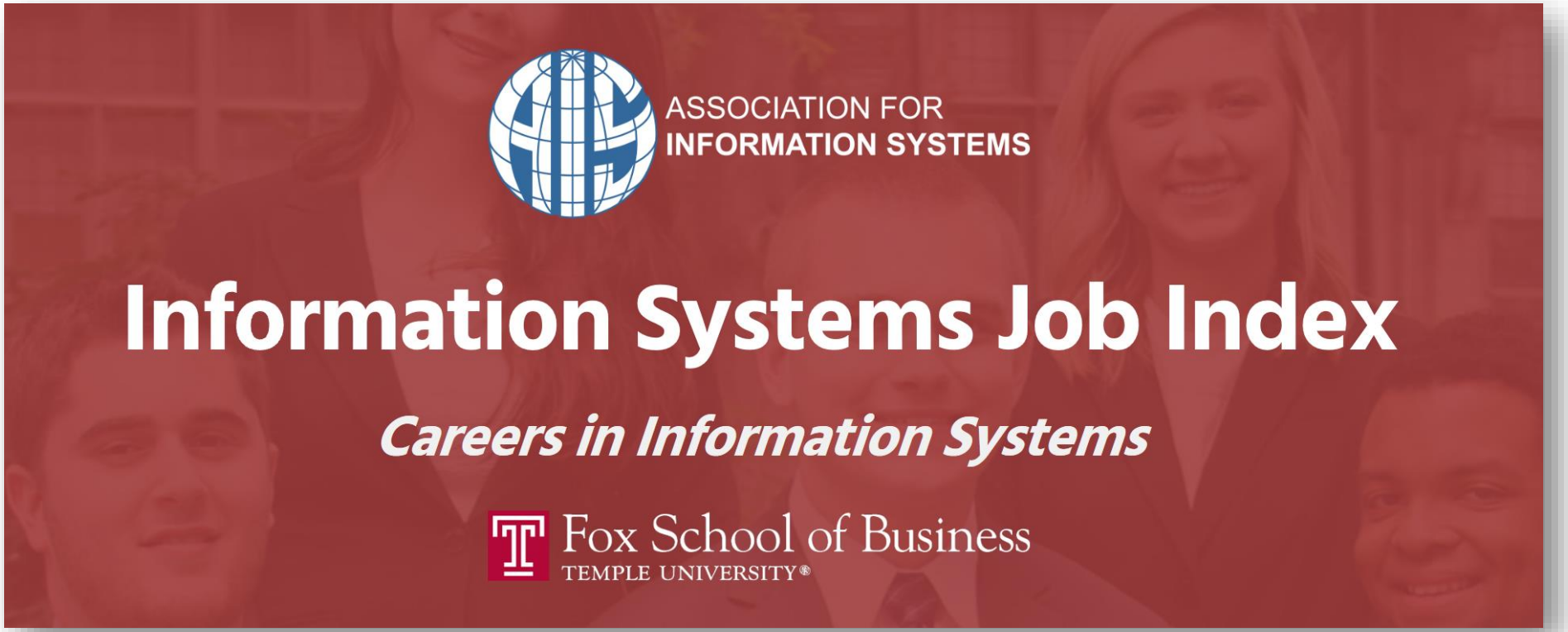
The In-class Activity – Canvas



- **Reinforce assigned materials**
  - **Readings**
  - **Videos**
  - **Lecture**
- **Exam Preparation**
- **Work in teams**
- **Must be present**
- **You keep your work**

Not Just Another Intro Class!

- Accounting
- Business Management
- Entrepreneurship & Innovation Management
- Financial Planning
- International Business Administration
- Marketing
- Risk, Insurance & Healthcare Management
- Supply Chain Management
- Actuarial Science
- Economics
- Finance
- Human Resources Management
- Legal Studies in Business
- Management Information Systems
- Real Estate
- Statistical Science and Data Analytics



Read the full report at **isjobindex.com**

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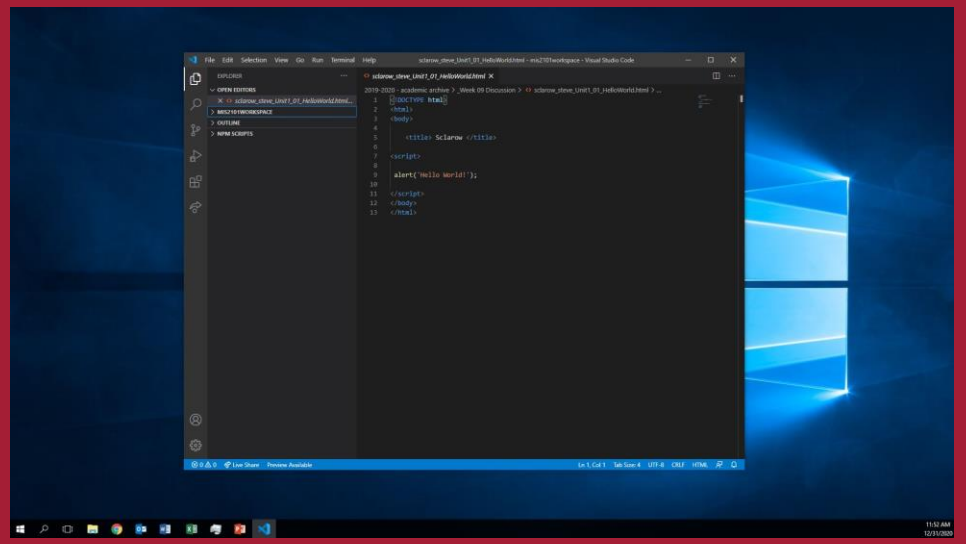
MIS

Based on 1420 recent graduates from 43 universities across the U.S.

FOX MIS

Class Site Review

- **https://community.mis.temple.edu/**



Course Overview Videos

Fall 2022

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ROADMAP

START

Week 1:
Introduction & Systems Analysis
- Course Description
- Systems Thinking

Assignments #01 & 02

Week 2:
Digital Product Management & Introduction to Process Mapping
- Max Labs 1a & 1b
- Systems & Processes
- Swim Lane Diagrams

Assignment #03

Week 3:
Data Modeling with Entity Relationship Diagrams
- Swim Lane Diagrams
- ERD Diagrams

Assignment #04

Week 4:
Digital Systems – Learn IT! #1
- ERD Diagrams
- Learn IT Kickoff

Assignment #05

Week 5:
Exam #1, Information Systems: Part I & II
- CRM & ERP

*Exam: check course site

Assignment #06

Week 6:
Information Systems: Parts I - III
- Data Analytics
- SCM

Assignment #07

Week 7:
Platforms & Digital Business Models, plus APIs
- Platforms & Digital Models, APIs
- Cybersecurity

- Assignment #08

Week 8:
Information Systems & Cybersecurity
- Protection Protocols
- Artificial Intelligence

Week 9:
Exam #2 & JavaScript Unit #1
- Parts I & II
- Hello World, Variables

*Exam: check course site

Week 10:
JavaScript Unit #2 Functions
- Values & Variables
- Operator types
- Strings

Assignment #9

Week 11:
JavaScript Unit #3 Logical Operators & Conditional Logic
- Logical Operators
- Conditional Types

Week 12:
JavaScript Unit #4 Loops
- Intro to Loops
- While and Do

Assignment #10

Week 13:
JavaScript Unit #4 Working with Loops & HTML & CSS Unit
- Writing the code
- HTML & CSS Basics

Week 14:
HTML & CSS Unit (continued)
- HTML & CSS Basics
- Course Reflection

Assignments #11

*Final Exam: check course site

FINISH

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Digital Systems

1.2 What are Systems?

FOX MIS

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Assignments #11
*Final Exam: check course site

FINISH

Max Labs

Fall 2022

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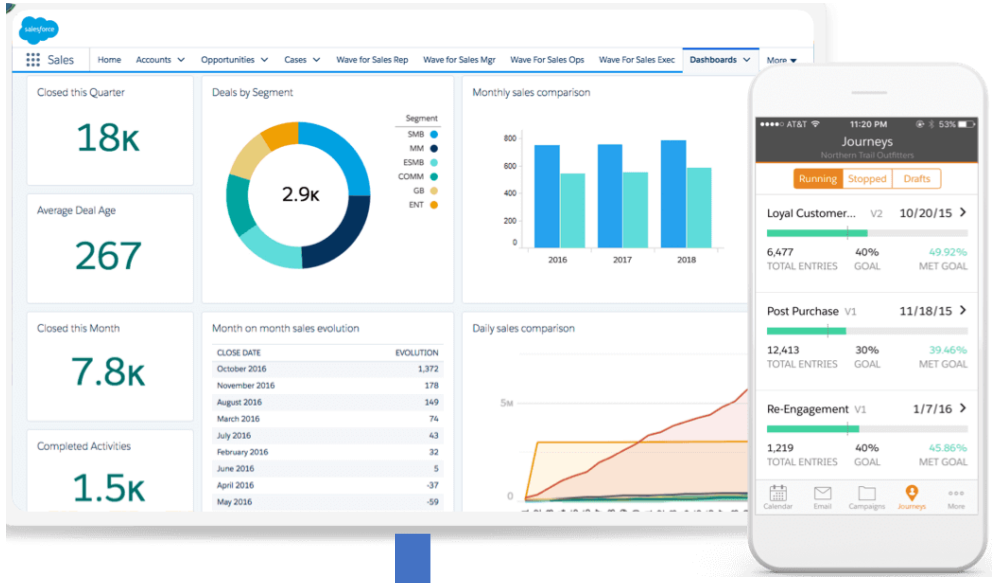
What is MIS?

Using Information Technology to solve business problems.

- **MIS is not Computer Science**
- **It's about business where we train people to do what?**
  - **Use technology to solve day-to-day business problems**



Sources: https://c1.sfdcstatic.com/content/dam/web/en_us/www/images/products/what-is-salesforce/whatis-jumbo-astro-product.png

https://www.kindpng.com/picc/m/568-5683178_real-cash-stack-100-dollar-bill-hd-png.png

World View – A collection of “Systems”

Systems = people + process + technology

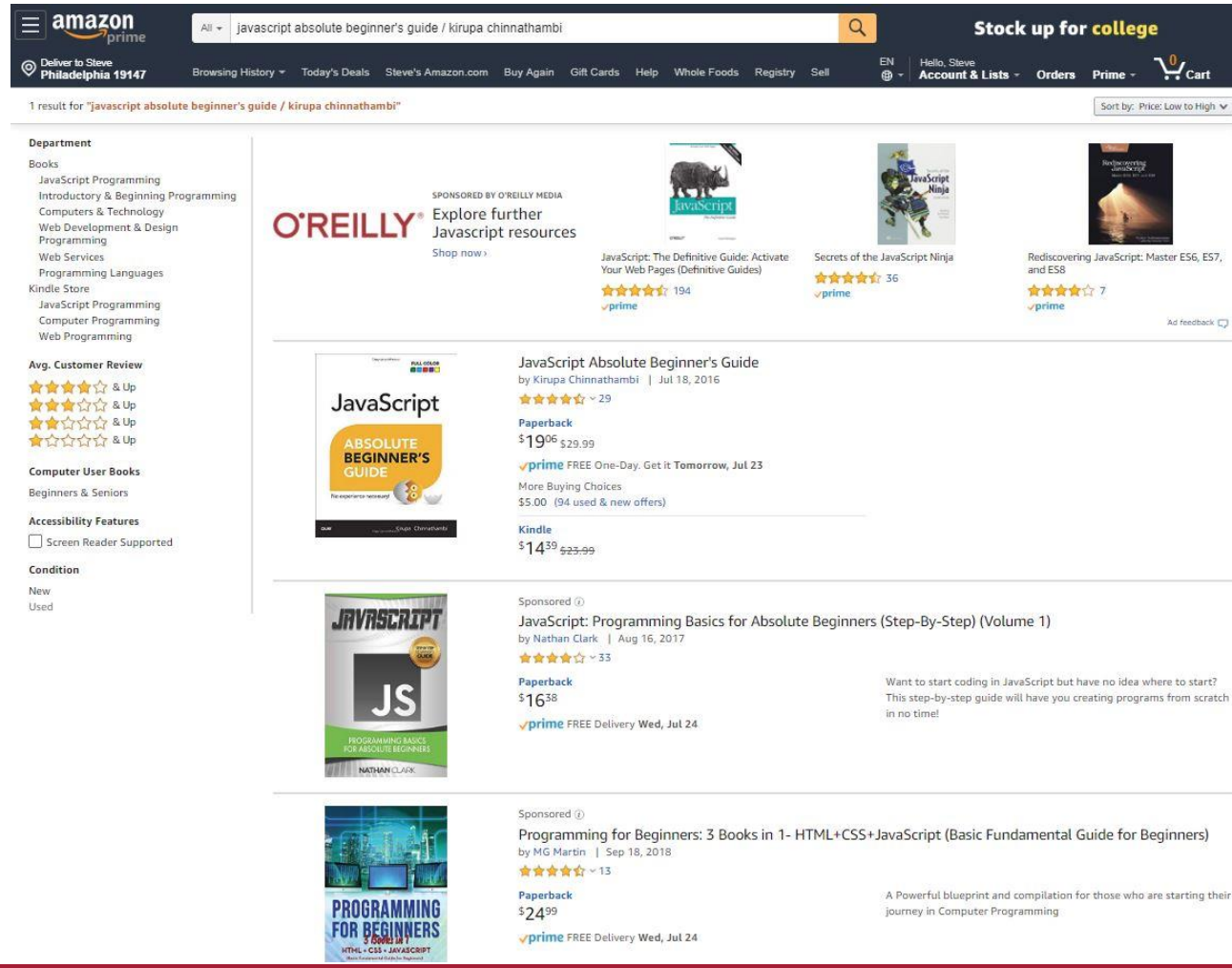
- Manipulation of information = value
- Managed by MIS professionals
- Systems surround us 24/7
- Application Program Interface (API’s)

Source: https://www.aecom.com/ca/management-information-systems-mis/

Understanding Systems

Buying textbooks on Amazon

- What was part of that system?
  - Log-in (multiple steps)
  - Search
  - Shopping Cart
  - Purchase (Multiple steps)
  - What else???



Understanding Systems (cont.)

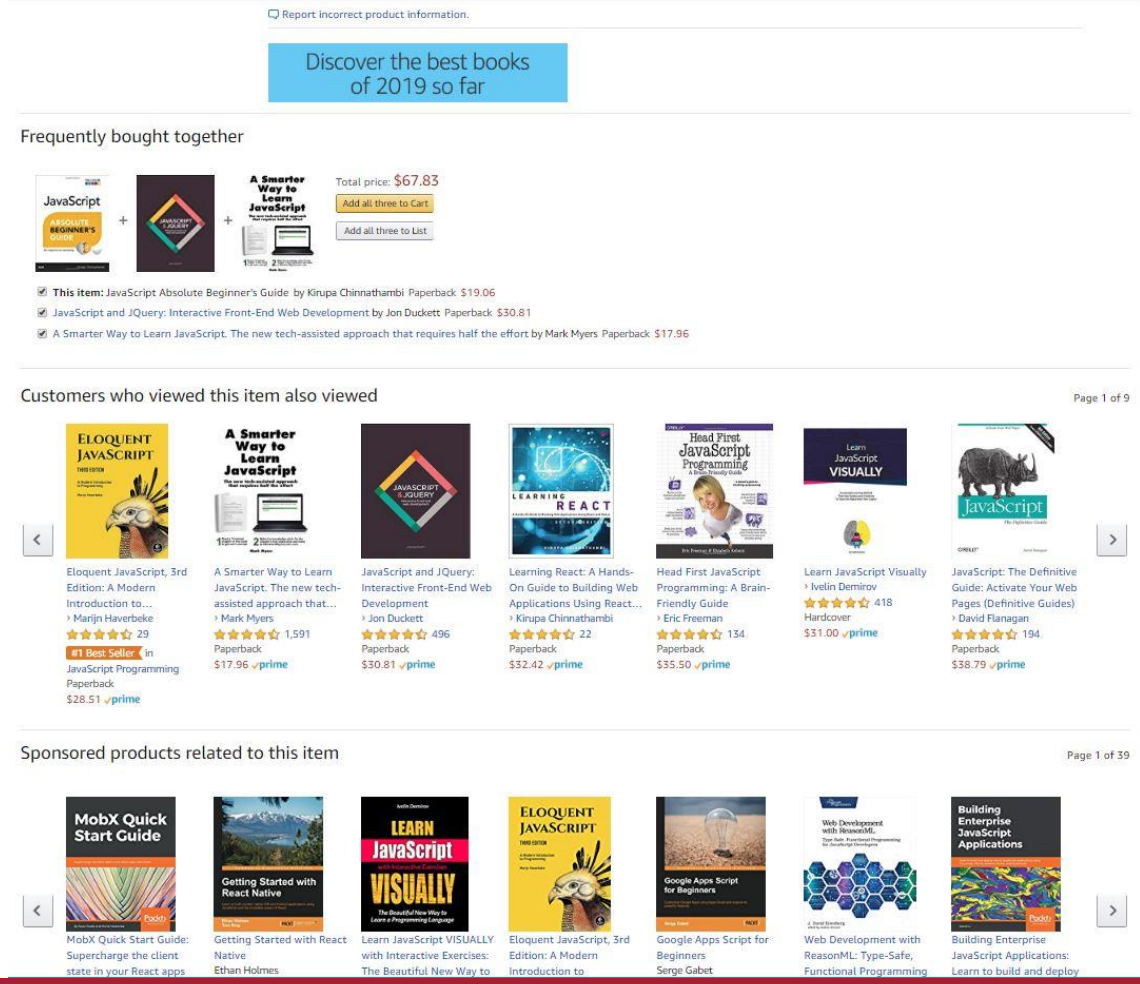
Buying lunch

- What was part of that system?
  - Take the order
  - Hand order to cook
  - Prep to-go bag
  - Order cooked (multiple steps)
  - What else???

Understanding Systems (cont.)

Describe the Process of Ordering

- What keeps info accurate?
  - Data
- Who is involved?
  - Customer ♦ Store ♦ Warehouse Mgr. ♦ Admin ♦ UPS driver…
- How much effort?
  - None…it's automated!
  - Technology !!!



“information system – *an integrated set of components for collecting, storing, and processing data and for providing information, knowledge, and digital products.*”

- Encyclopedia Britannica

Source: https://www.britannica.com/topic/information-system/Management-support

API's Case Study: UBER

Requesting a ride?

- **Describe what happens...**
  - **What are these systems?**
  - **How do they work?**

Source: https://www.okta.com/security-blog/2019/05/how-uber-takes-advantage-of-the-api-economy/

SDLC methodologies

- **Waterfall**
- **Agile**
  - **Lean**
  - **Scrum**
- **Iterative**
- **DevOps**

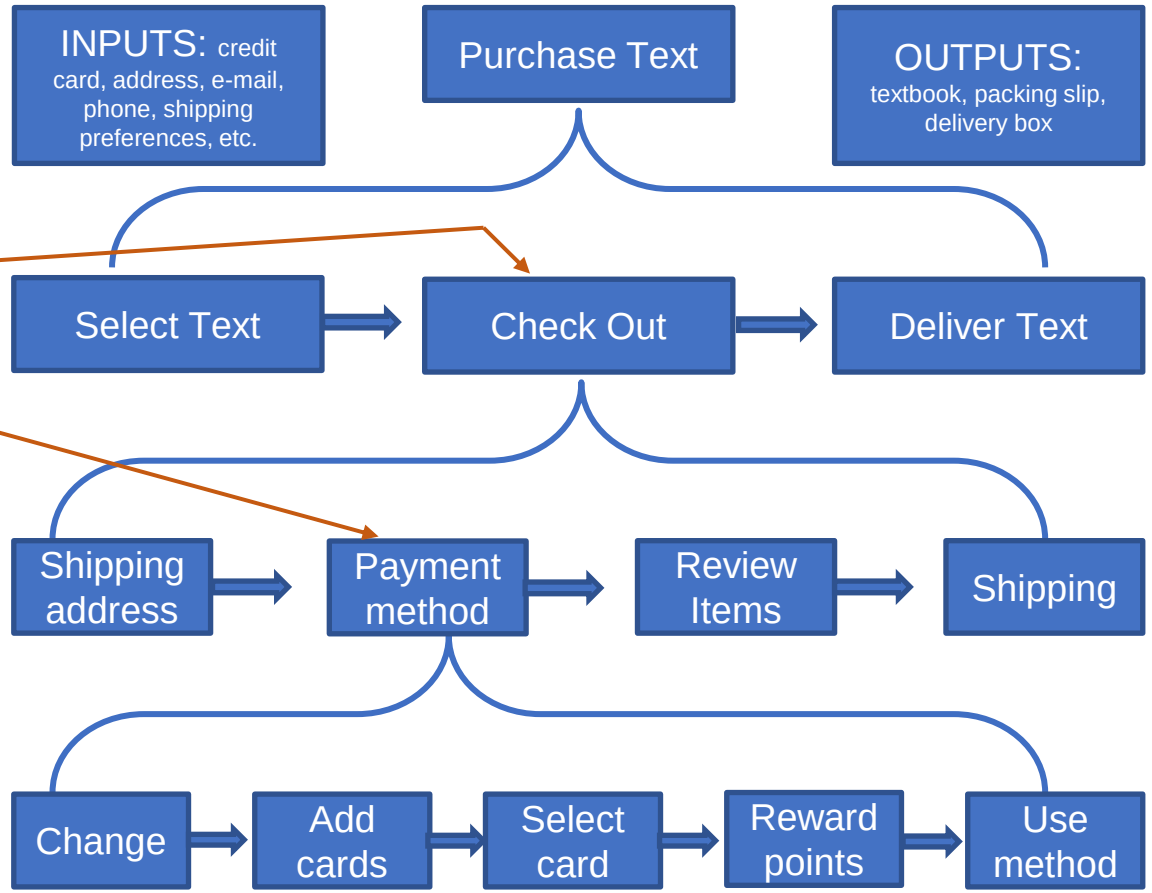
Image: http://www.xanadutec.com/software-as-a-service.html

“Once a Product Manager / Technologist understands the *business problem*, they can architect a solution.”

- Mart Doyle

Process Decomposition

- **Single entity**
- **Subsystem**

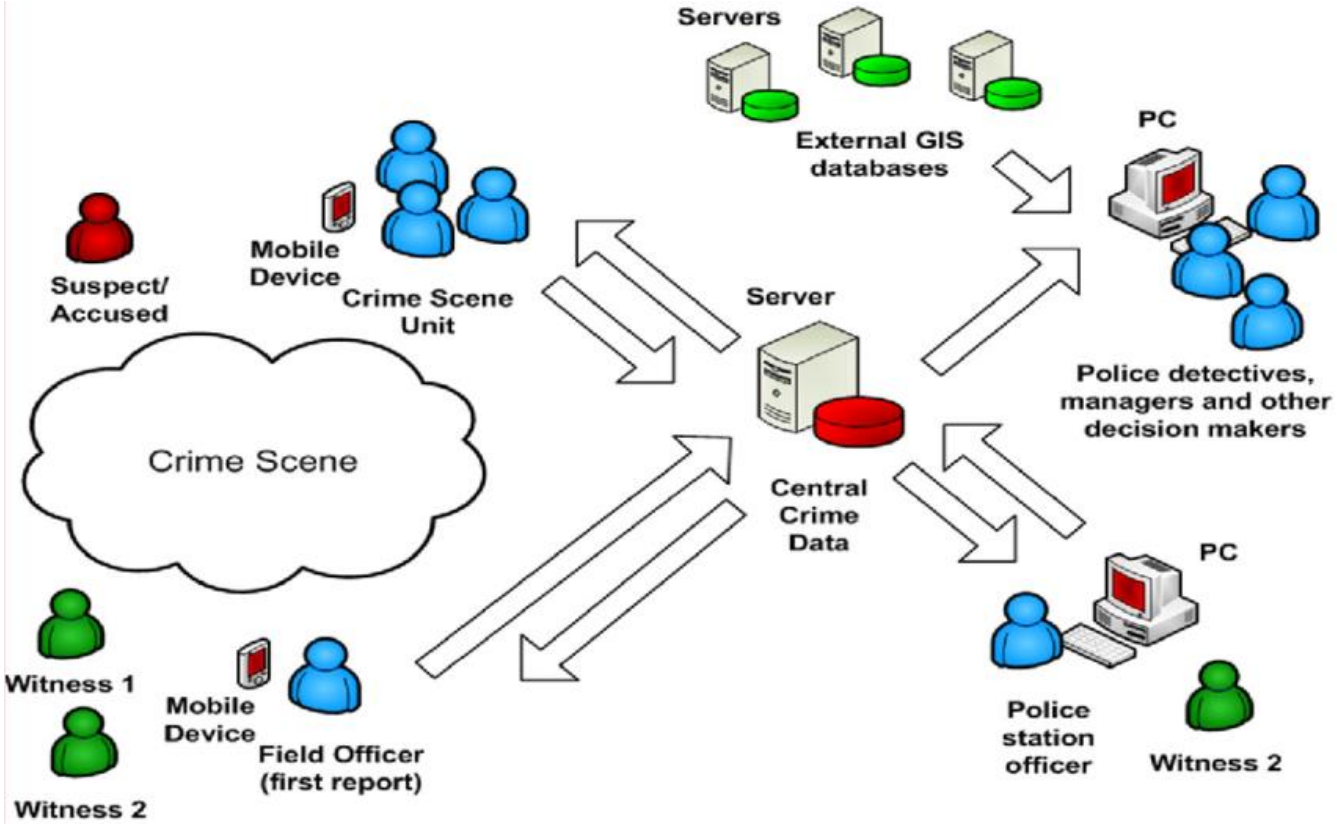


“Systems Architecture is a response to the conceptual and practical difficulties of the description and the design of complex systems.”

- Boris Golden

Systems Architecture

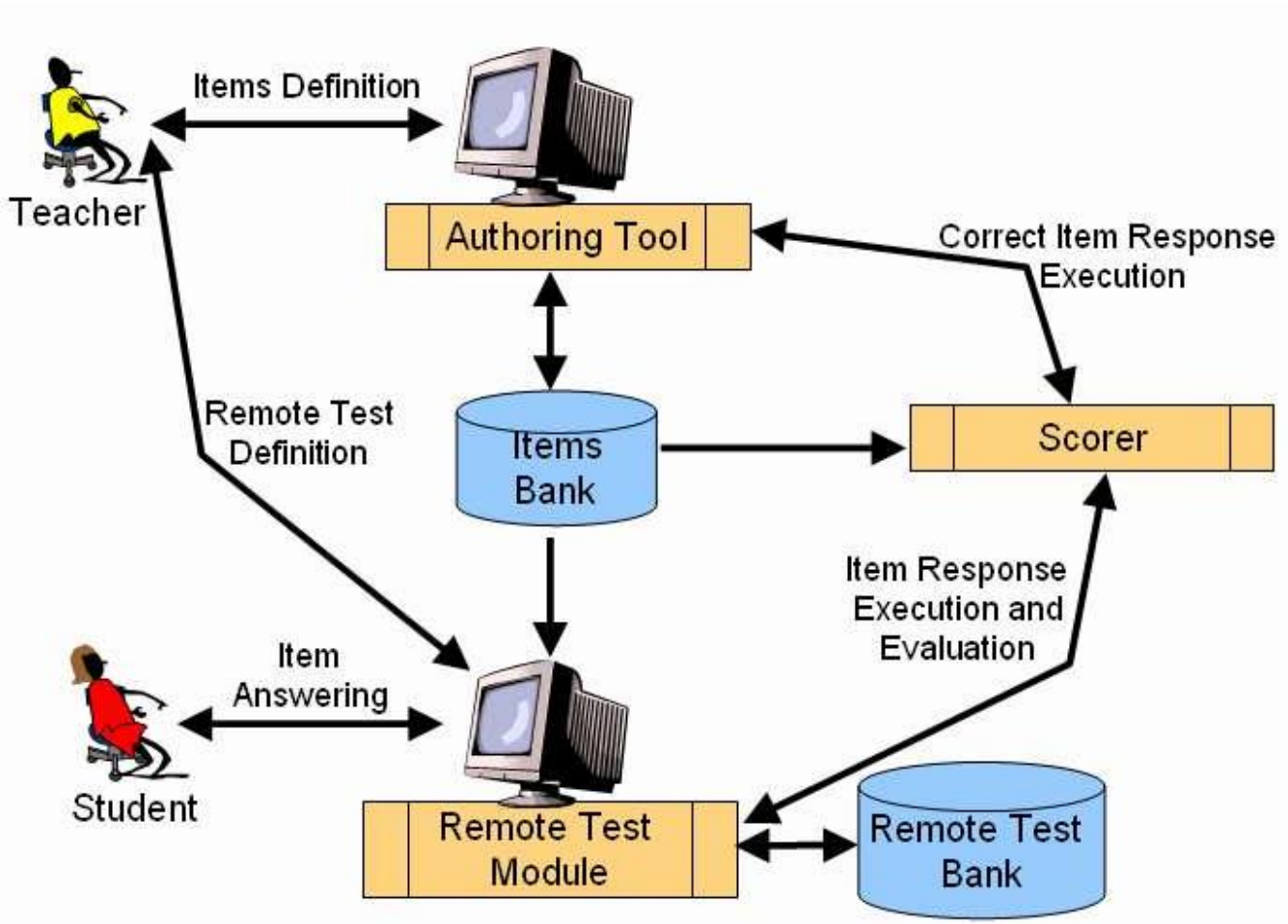
- Conceptual Diagram
- Structural components
- Identify/Solve Problems
- Existing or New
- Communication tool



Source: https://www.researchgate.net/figure/Conceptual-System-Architecture_fig2_327987580

Systems Architecture

- Test question defined
  - Authoring tool
- Remote test created
  - Test module
- Student responses
  - Test module
- Execution & Evaluation



Source: http://spmarchitecture.com/systems-architecture/system-architecture-learning-environment-for-automatic-rating-64721-2/

More to Come

Prepare with Readings & Videos before our next class!!!