



InPress

Computer Science 4ZP6 Capstone Project

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The Problem

- ¶ Lack of interaction between Instructors and Students
- ¶ Learning Pitfalls
- ¶ Hardware Constraints
- ¶ Communication barriers





The Solution

&Web-Based Application
(Compatible on most
internet enabled devices)

&Real-time interaction
and feedback from
students

&No extra physical
hardware required

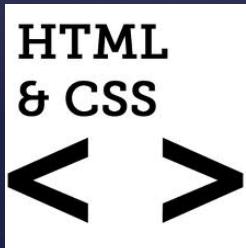
&Open Source (Free!)



Implementation



django



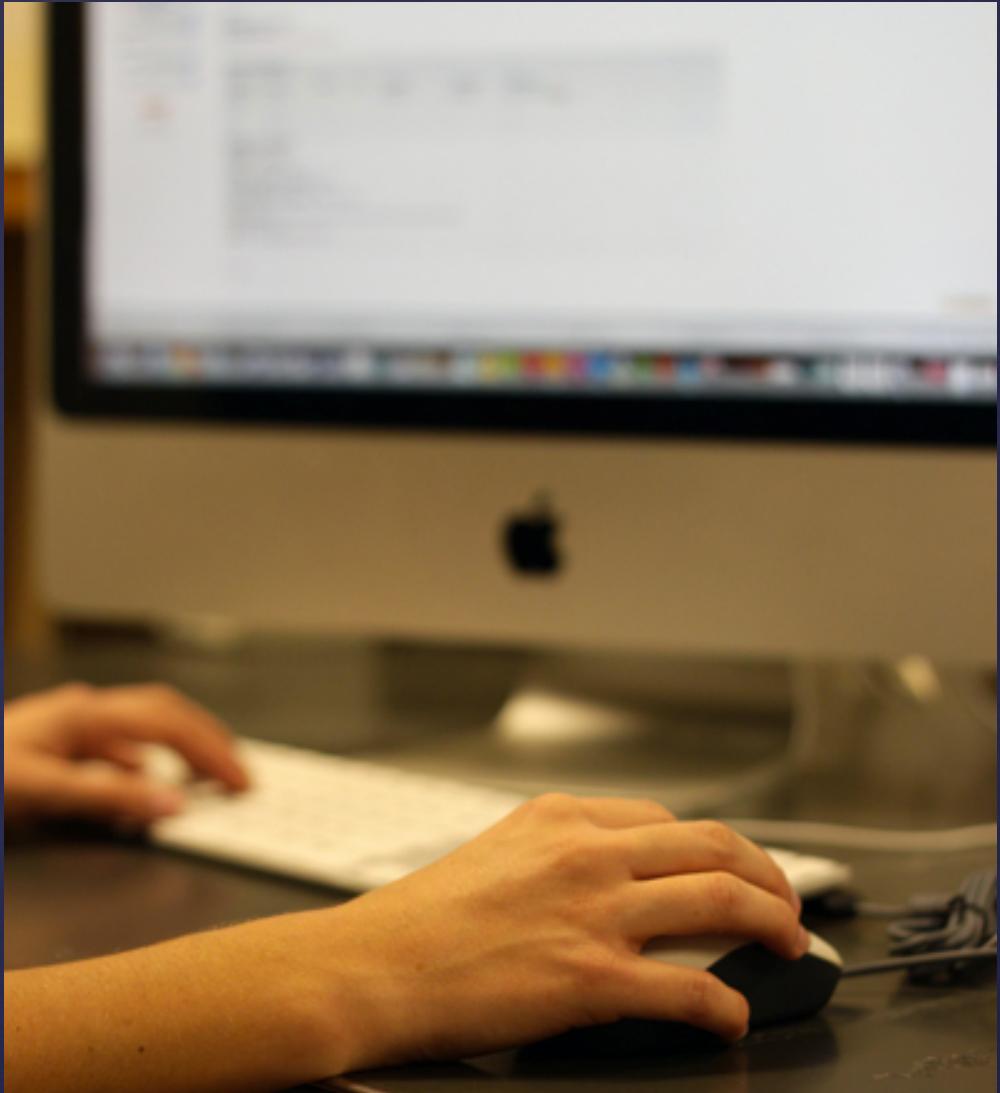
Two main modules:
=> Instructor
=> Student

=> Technology Used
=> Python
=> Django
=> Javascript/AJAX
=> PostgresSQL
=> Server Used

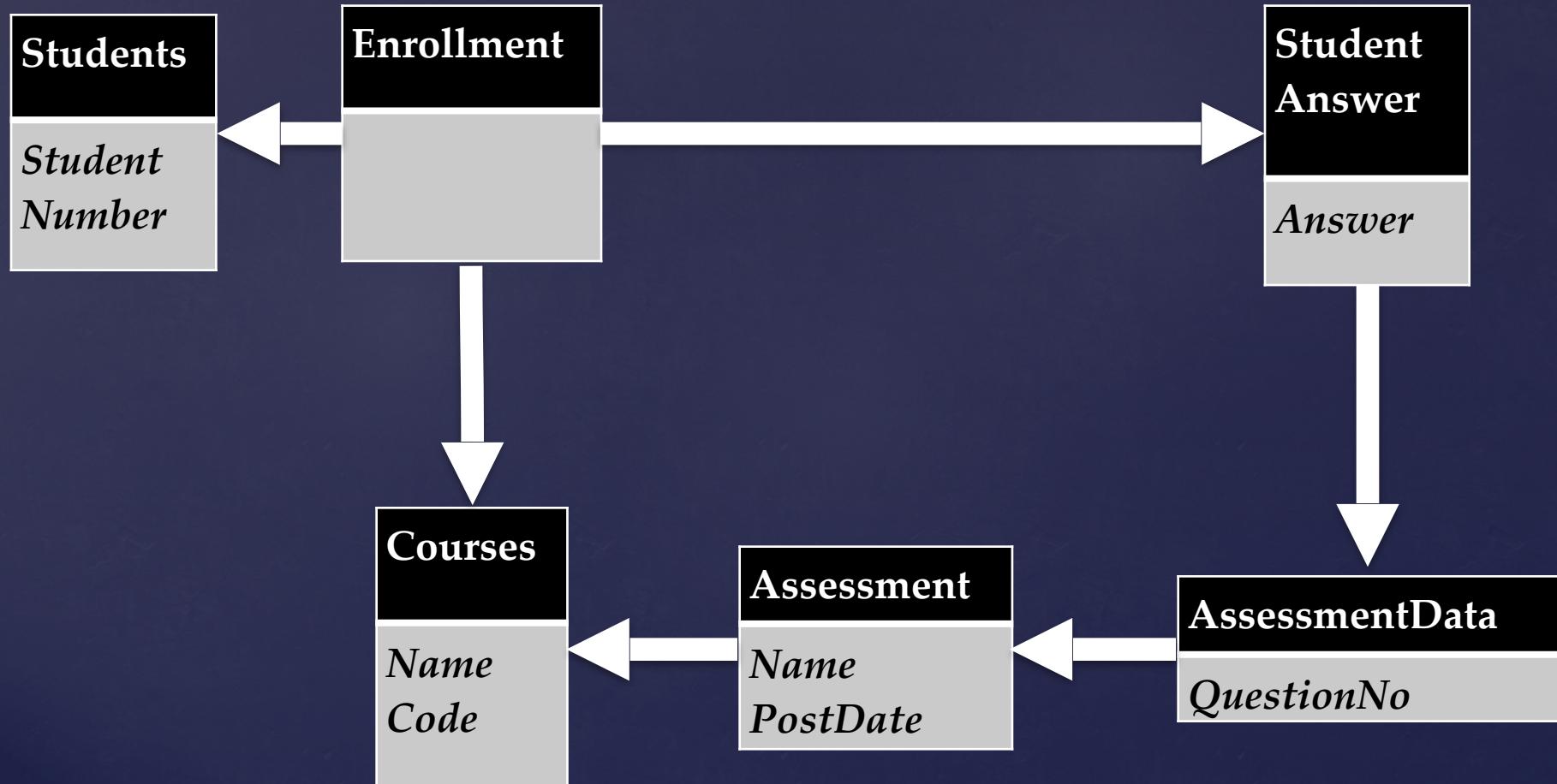


Instructor

- ❖ Create Questions in seconds
- ❖ LaTeX Supported
- ❖ Real-Time Data Analysis



Database Schema





Instructor Demo



Manage Course Enrollment

Assessment - Posting, Effective Date

Data Analysis

InClass Mode



Student

- ¶ Visit course page
- ¶ Answer questions with classmates together
- ¶ Review questions and answers after class
- ¶ Student data structure
 - ☒ Student number
 - ☒ Student answer

InPress - Student's Module Home My Courses ▾

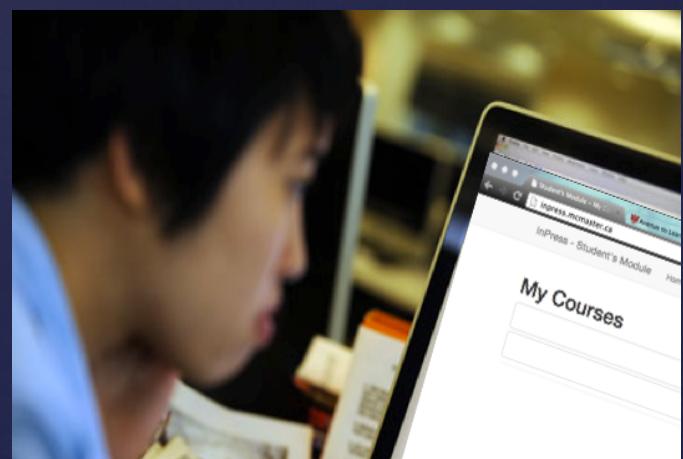
Cascade Control

Question: The additional cost of adding cascade control is

Answer:

- Nothing: we can add it to any existing system
- The cost of a new sensor only
- A new sensor, and a new controller are required
- A new sensor, and a new manipulated variable (valve) are required
- A new sensor, a new manipulated variable (valve), and a new PID controller

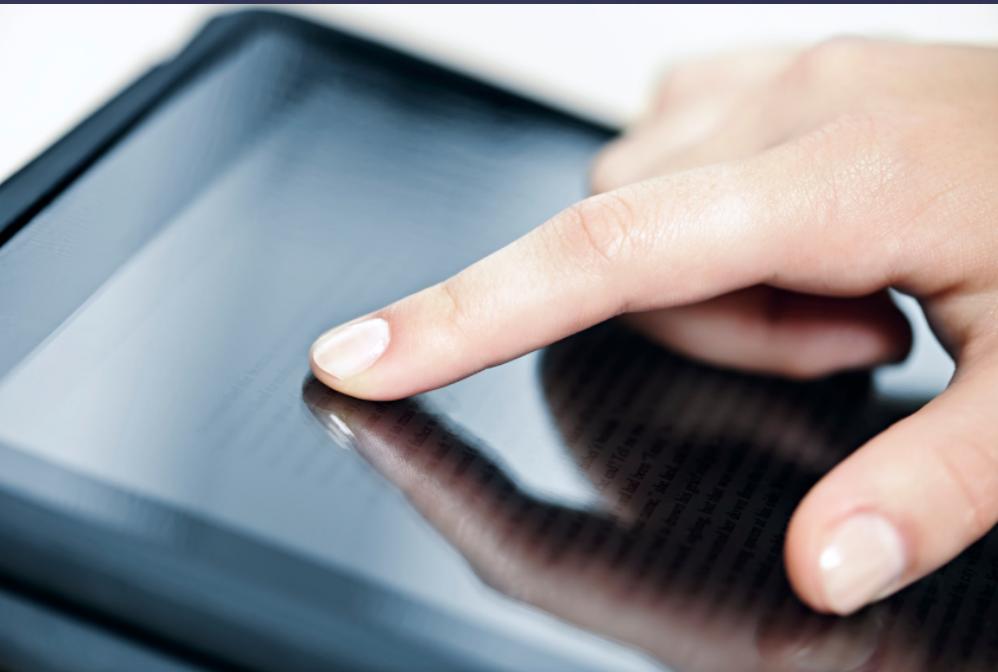
[Previous Question](#) [Next Question](#)





Student Answer Analysis

- ❖ Student's Answers - Real Time Update
- ❖ Instructor can see the answer summary
 - ❖ How many answered
 - ❖ Which answer been most answered



It's Demo Time!

<http://inpress.mcmaster.ca/instructor/login.html>



Student Login

Student Number

Sign in



Field Test



- ¶ First Field Test
- ¶ Investigation & Results
- ¶ Second Field Test

First Run

Chrome File Edit View History Bookmarks Window Help

U.S. 83% Fri 11:07 AM

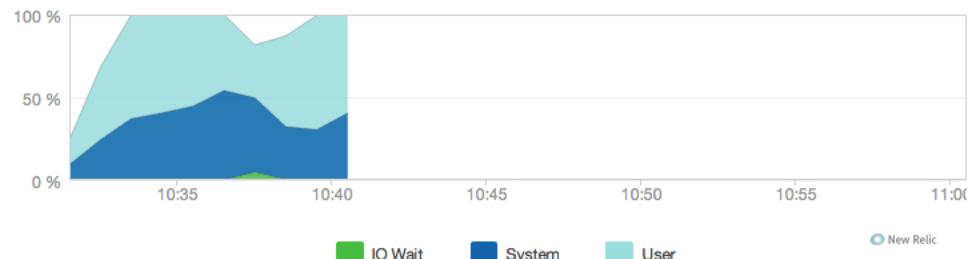
<https://rpm.newrelic.com/accounts/646656/servers/2764395>

inPress - New Relic | Dashboard 305 - New Relic | f Yes. They driver like that | M Inbox - jkanvc@gmail.com | M Solutions to quiz - kanvc@

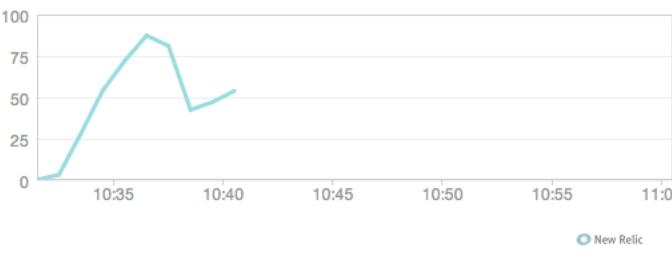
Apps inPress 4f03 COMP SCI 4TB3 / 6T 國際貨幣匯率 Forensics backtrack Development linux Jobs Important Dates: Sp registrar.mcmaster.c Other Bookmarks

This server is no longer reporting. Delete it permanently

CPU usage



Load average



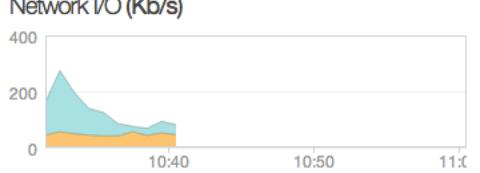
Physical memory



Disk I/O utilization



Network I/O (Kb/s)



inPress

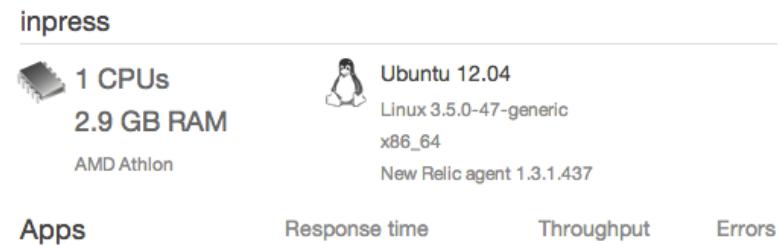
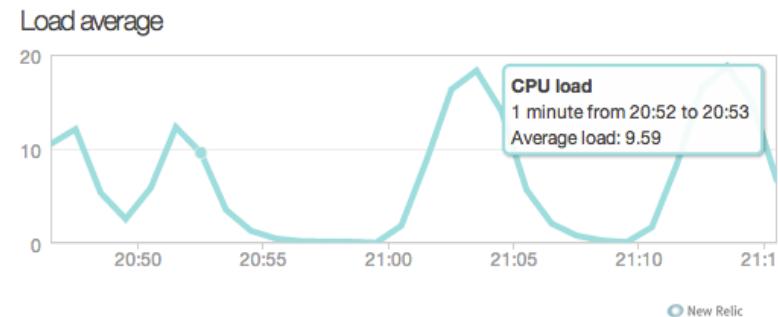
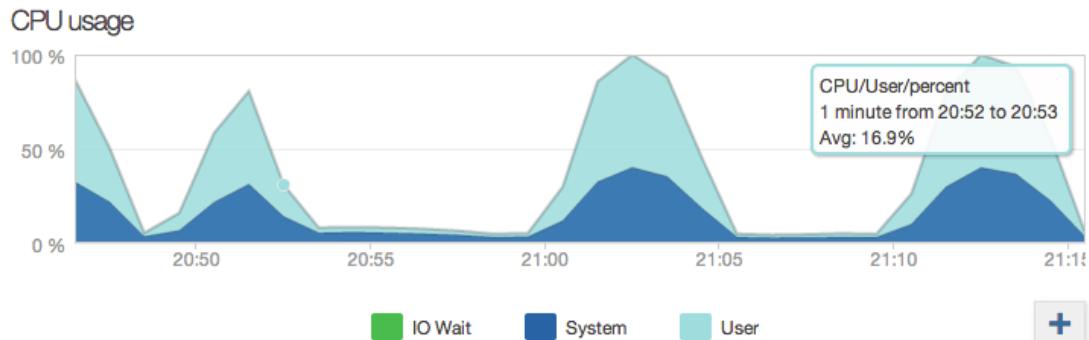
1 CPUs Ubuntu 12.04
0 KB RAM Linux 3.5.0-46-generic
AMD Athlon x86_64
New Relic agent 1.3.1.437

Apps	Response time	Throughput	Errors
This server isn't hosting any apps that report to New Relic			

Processes →

	User	Count	CPU	Memory
apache2	www-data	54	58.5%	888 MB
nxserver.bin	nx	2	0.2%	21.7 MB
postgres	postgres	7	1.8%	14.9 MB
bash	kevindunn	1	0.4%	8.3 MB
apache2	root	1	0.5%	8.17 MB

Last Run





The Next Steps



- Portability
- Security
- Installation kit
- Localization



Conclusion



Question Time