



# Project CampusList

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# Outline

- ▶ The Problem
- ▶ The Solution
- ▶ How It Works
- ▶ Web System Design
- ▶ Infrastructure
- ▶ Data Flow
- ▶ System Overview
- ▶ Software Overview
- ▶ Design
- ▶ Time and Cost
- ▶ Conclusion



# The Problem

- ▶ Online classifieds are monopolized by Craigslist
  - ▶ Not everyone feels safe
  - ▶ Incredibly broad scope for a website
  - ▶ Unpredictability
- ▶ Textbooks, computers, tablets, furniture, and other items used every day by college students are very expensive while college students are usually on a strict budget.
- ▶ No websites exist specifically for college students to buy, sell, and trade, even though college students are in dire need of an easy marketplace for school, living, and other materials.



# The Solution

## CampusList.org

- ▶ Allow students, alumni, and other local citizens to post classified ads
  - ▶ Buy, Sell, Trade goods
    - ▶ Textbooks
    - ▶ Computers
    - ▶ Furniture
    - ▶ & More
  - ▶ Job/Internship/Apprenticeship postings
  - ▶ Apartment/House Rentals
  - ▶ Discussion/Study Groups for classes



# How It Works

## ▶ Revenue

### ▶ Generated much like Craigslist

- ▶ Fee for posting job ads
- ▶ No Advertisements

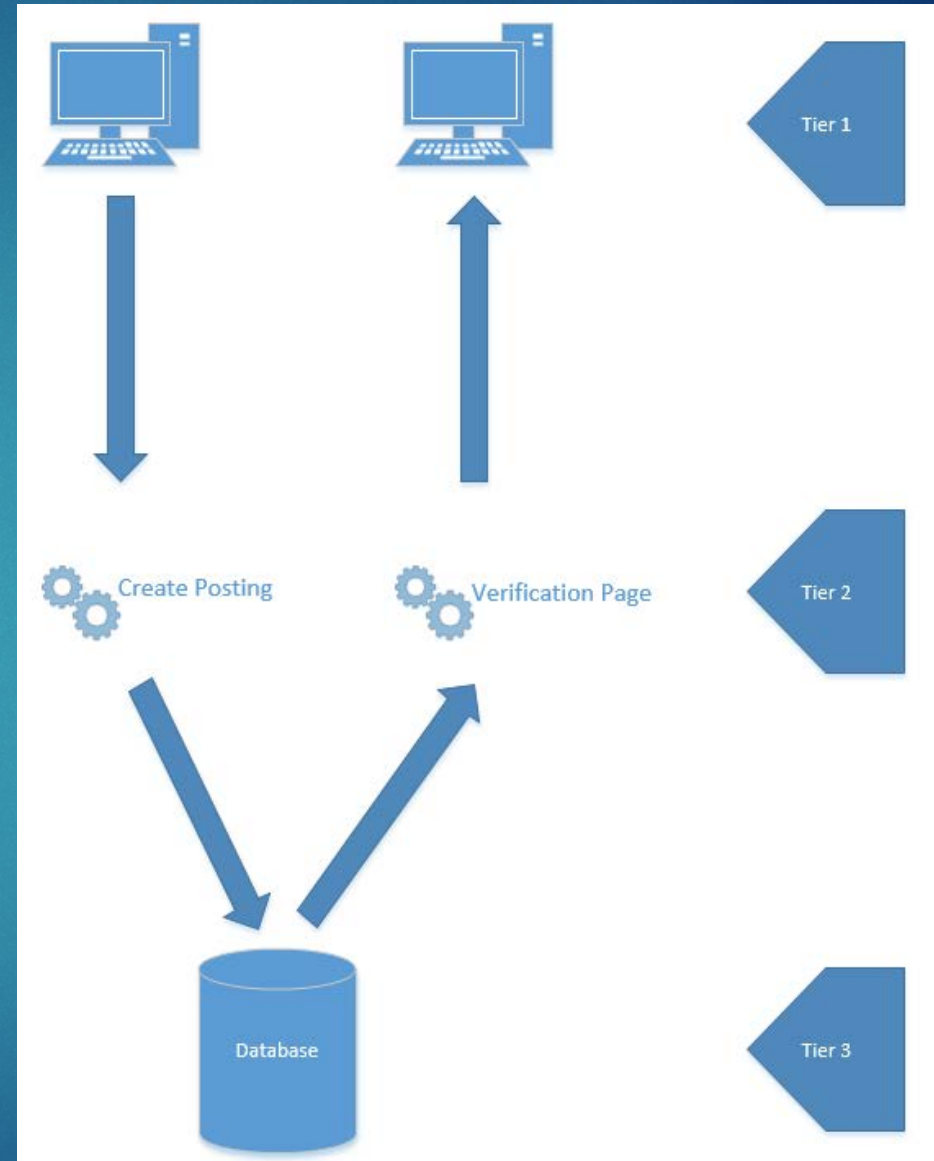
### ▶ Limited number of free postings per account, per month

### ▶ Would need to be judged for the growth of the site whether or not it is sufficient

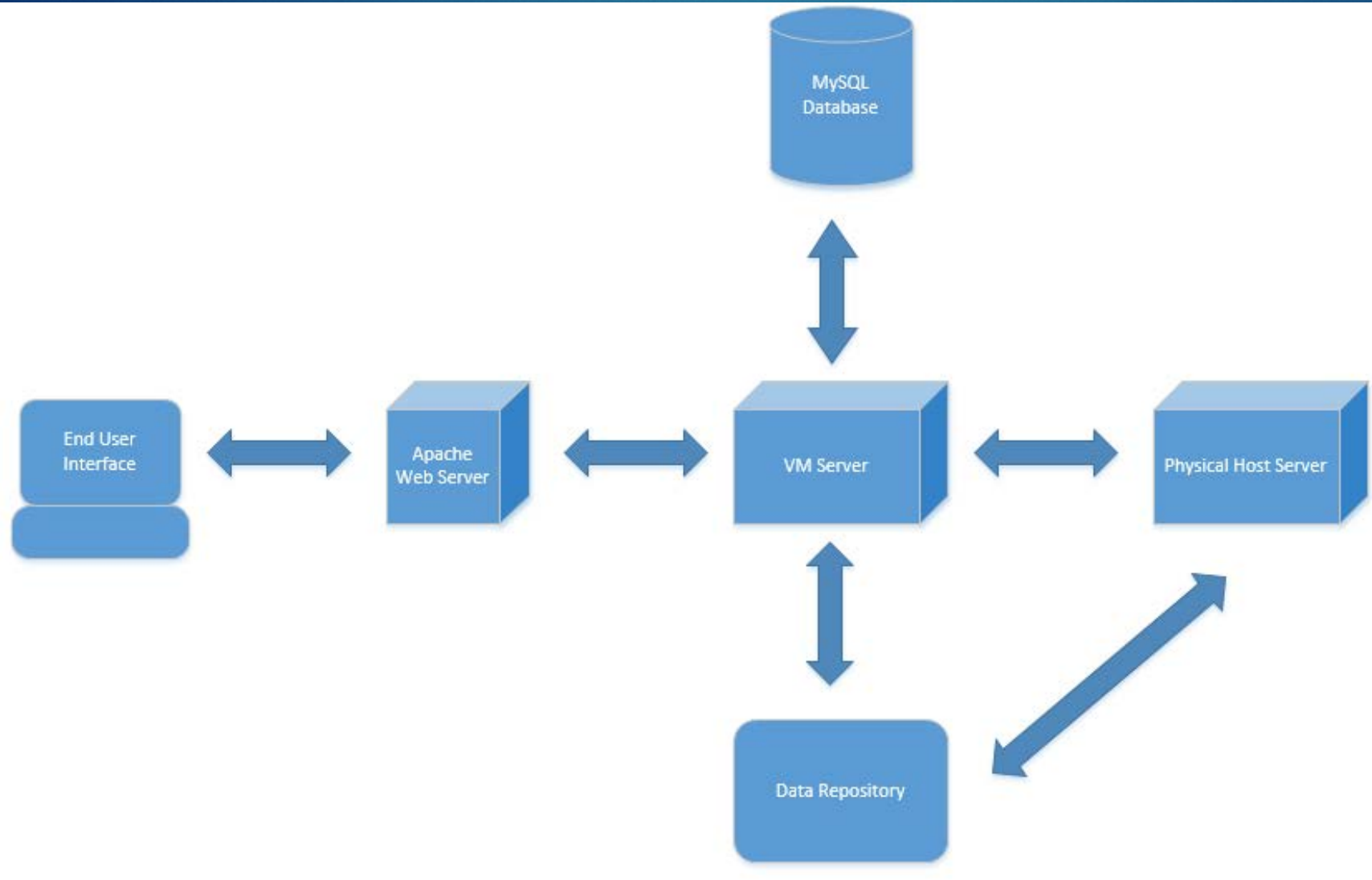


# Web System Design

- ▶ Three tier architecture
  - ▶ Tier 1 – Webpages
  - ▶ Tier 2 – Application Server
  - ▶ Tier 3 – Database server

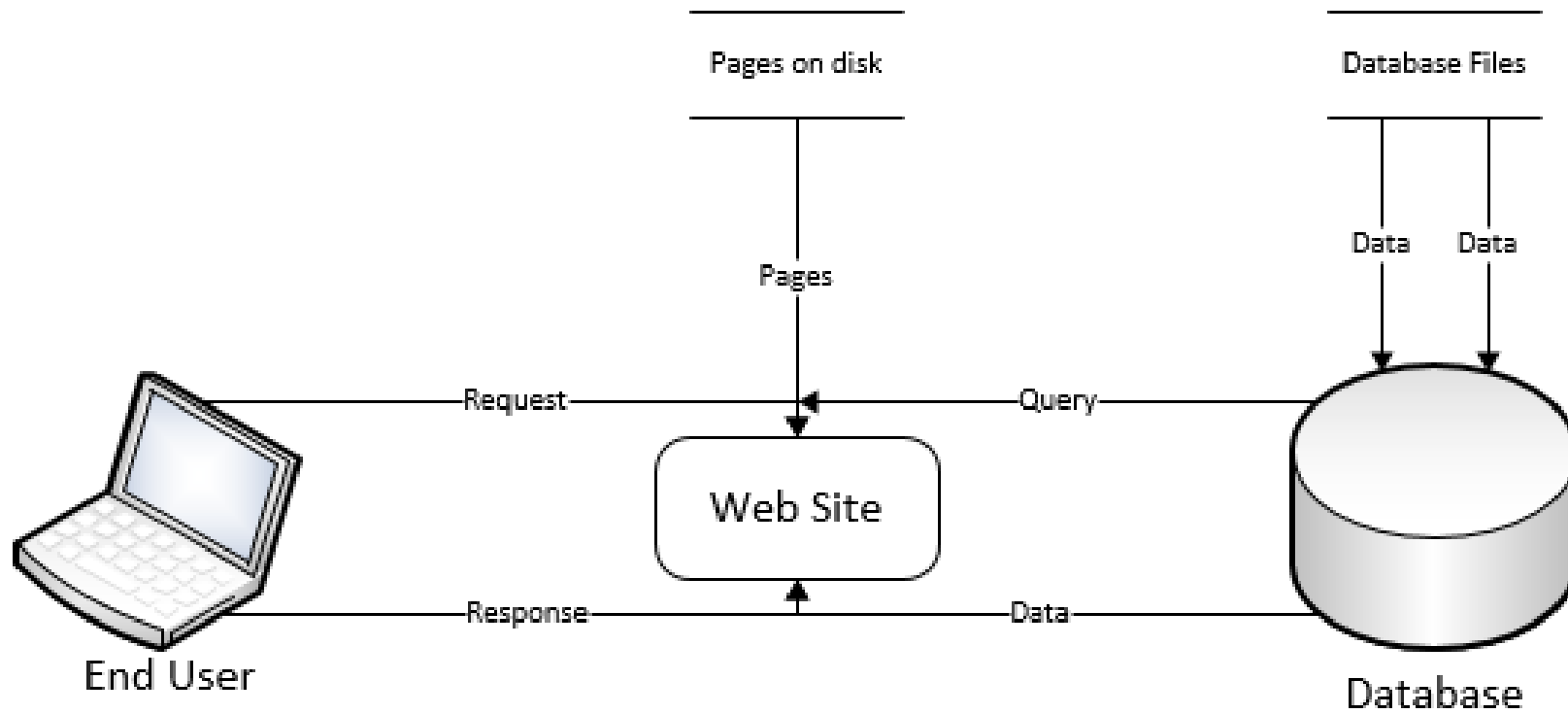


# Infrastructure





# Data Flow





# System Overview

- ▶ Hosted externally
  - ▶ Help gauge actual server requirements and best decide how to host multiple iterations of the site
- ▶ Hardware Req. (of external host)
  - ▶ Processor – Current generation Intel Xeon Processor with 4 or more cores
  - ▶ Memory – 4 GB of RAM
  - ▶ Storage – 1 TB of storage
    - ▶ This may seem high, but this is for the sake of future-proofing and the fact that there may be many postings with multiple pictures at any given time



# System Overview Cont.

Though we are hosting off site initially, we still need to be sure that we purchase an off-site host that is capable of running our site and ensuring maximal uptime as well as quality of service

- ▶ We intend to use one server per site
- ▶ We assume that maximum traffic would be equal to or lesser than half of IPFW's current enrollment at any given time.
  - ▶ Though people who are not students CAN access the site, we feel safe to assume that the traffic would not exceed this number.
- ▶ That number is not hard to host on a server, thus the requirements are relatively simple



# Software Overview

We would use the following software titles mostly for the sake of ease of support and maintenance, as they are usually the industry standard

- ▶ **VMWare ESXi** – On physical server to host virtual machines
- ▶ **VMWare vSphere** – Manage and maintain multiple virtual machines
- ▶ **Windows 2012 Server** - Easy to maintain server OS with tons of compatibility and support, this will be the OS of the virtual machines
- ▶ **XAMPP stack** - Free, easy to maintain web system stack that is used by a very large percentage of websites in use today
- ▶ **Java Eclipse** - develop site as well as maintain and make changes to the code in the future



# Design – Keep it Simple





# Design Cont.

This wireframe shows a website layout with a vertical navigation menu on the left and a large main content area on the right. The navigation menu includes a logo for IPFW (Indiana University Purdue University Fort Wayne) and a 'CampusList' header, followed by buttons for Home, Discussions, For Sale, Housing, Jobs, Personals, Study Groups, and Local Activities. The main content area is divided into two sections: 'Topics' at the top and 'Postings' below it.

IPFW | INDIANA UNIVERSITY  
PURDUE UNIVERSITY  
FORT WAYNE

CampusList

Home

Discussions

For Sale

Housing

Jobs

Personals

Study Groups

Local Activities

Topics

Postings

This wireframe shows a website layout with a horizontal navigation menu at the top and a large main content area below it. The navigation menu includes a logo for IPFW (Indiana University Purdue University Fort Wayne) and a 'CampusList' header, followed by buttons for Home, Discussions, For Sale, Housing, Jobs, Personals, Study Groups, and Local Activities. The main content area is divided into three sections: 'Department', 'Class', and 'Type of ad' at the top, and 'Postings' below them.

IPFW | INDIANA UNIVERSITY  
PURDUE UNIVERSITY  
FORT WAYNE

CampusList

Home

Discussions

For Sale

Housing

Jobs

Personals

Study Groups

Local Activities

Department

Class

Type of ad

Postings



# Design Cont.

- ▶ The idea behind CampusList is to directly compete with Craigslist.org
  - ▶ Familiar design for Craigslist users
  - ▶ More modern and appealing to younger user base
  - ▶ Includes visual cue for current page (IPFW logo)
- ▶ Keeping it simple
  - ▶ Very easy to code and maintain
  - ▶ Very simple to navigate
    - ▶ Trade off – not the most visually appealing
    - ▶ Easy to learn
  - ▶ Fewer needed resources to host and run



# Time and Cost

Column1	Column2	Column3	Column4
Activity	Description	Time Estimate	Cost Estimate
Graphical Design	Design the GUI that users will interact with on the site	1-2 weeks	\$1200 - \$2400
Back-End Design	Choose how to format the code that runs the site, and how the different pages will interact	1-2 weeks	\$1200 - \$2400
Site Coding	Code the website from start to finish	3-4 weeks	\$3,600 - \$4,800
Testing	Test the site's stability and resistance to service interruptions	2-3 weeks	0
Web Server Software Setup	Load necessary software to host the site onto the server and prepare site for opening	1 week	\$5 monthly
Site Deployment	Open the site for use by the public	3-4 days	
Opening advertising	Advertisements for the site to bring in initial users	1-2 weeks	\$5,000
Monitoring and Maintenance	Monitor the stability of the system and number of users, maintain site if necessary	?	
	<b>TOTAL</b>	9-13 weeks	\$14,700



# Conclusion

- ▶ Great potential for market share
- ▶ Appeals to a large but still niche market
- ▶ Appeals to a market dominated by tech-savvy individuals
- ▶ Easy to maintain
- ▶ Easy to grow
  - ▶ Hardware requirements are linear for the most part, meaning it is easy to gauge necessary investments in hardware as we grow\
  - ▶ Multiple sites would use nearly identical source code
- ▶ Would differentiate from Craigslist by the specificity of the site



# Q&A

Ask any questions that you might have



Demo

