Udemy Data Analysis

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Project Description:

- *To better understand the pricing and subscriptions data of Udemy courses (for four different subjects) and identifying trends and patterns*

- *This will help us to:*

  - *Identify for which subject more courses should be created*
  - *Create targeted strategies to increase the company revenue*

Key questions:

1. What are the total numbers of subscribers in each subject?
2. How does the average content duration/price/number of students vary across different subjects?
3. How many courses are free and paid for each subject?
4. What is the average price of web development courses at different levels?
5. What are the 20 most popular courses? Also, include the following information:
   - Their level
   - Whether they are free or paid
   - Whether any are free beginner courses,
   - and the duration of the courses.
6. Does content duration impact the price of the course?

Findings & Insights

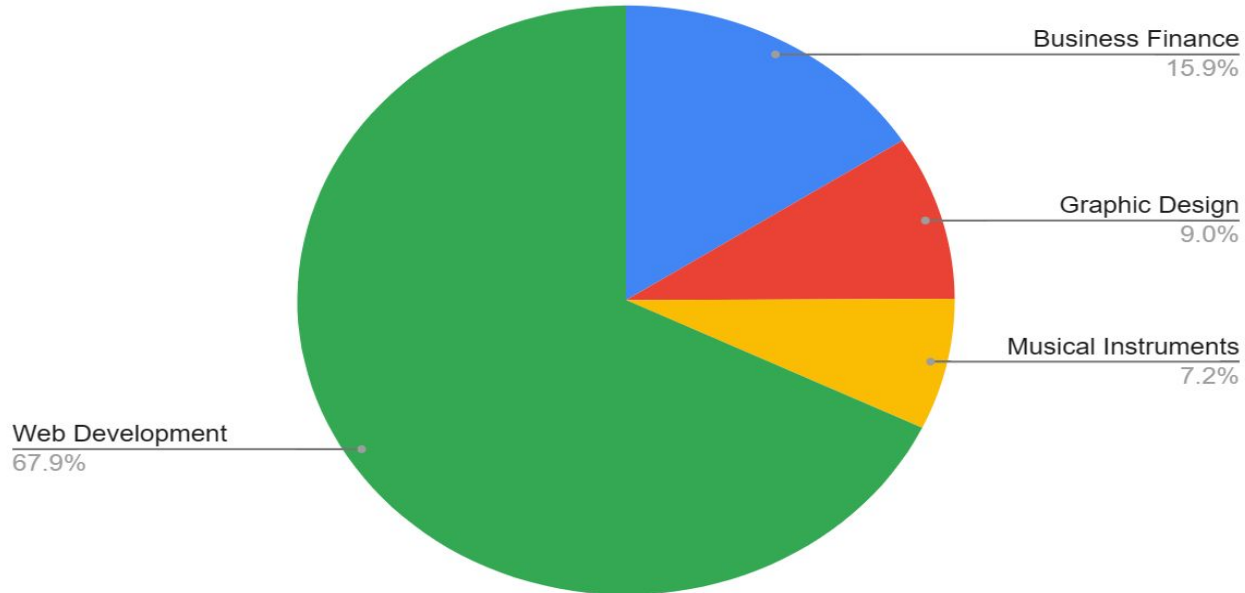**1.** **What are the total numbers of subscribers in each subject?**

Fig 1a:

subject	SUM of num_subscribers
Business Finance	1868711
Graphic Design	1063148
Musical Instruments	846689
Web Development	7981935
Grand Total	11760483

Figure 1b:

Web development has the highest number of subscribers (67.9%) and musical instruments has the least (7.2%).

Total subscribers

Business Finance
15.9%

Graphic Design
9.0%

Musical Instruments
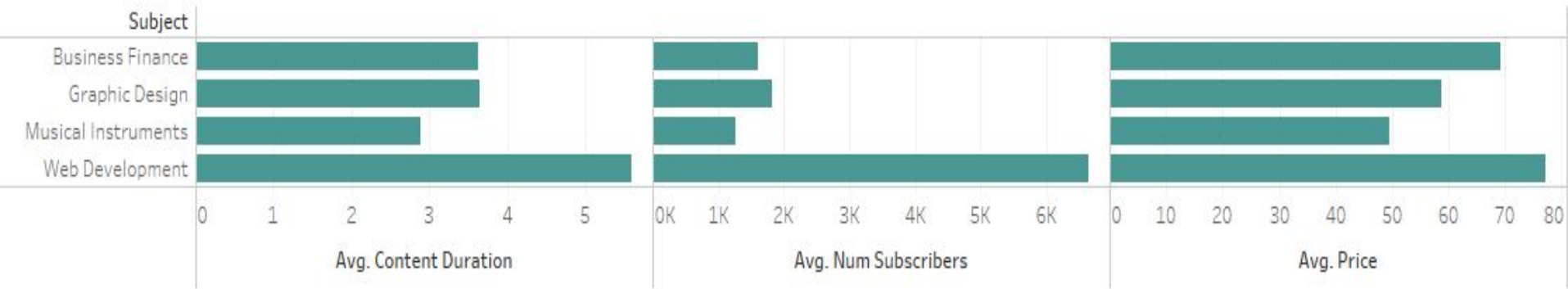7.2%

Web Development
67.9%

2. How does the average content duration/price/number of students vary across different subjects?

Figure 2:
Once again musical instrument has the least average values, and web development has the highest for all average values.

Average Content Duration/ Number of Subscribers/Price across all subjects

3. How many courses are free and paid for each subject?

Figure 3a:

COUNTA of free or p. free or paid subject	free	paid	Grand Total
Business Finance	96	1059	1155
Graphic Design	35	549	584
Musical Instruments	46	623	669
Web Development	134	1069	1203
Grand Total	311	3300	3611

Total paid courses are about ten times more than the total free courses.

4. What is the average price of web development courses at different levels?

Fig 4a:

AVERAGE of price	subject
level	Web Development
All Levels	74.55
Beginner Level	78.54
Expert Level	67.14
Intermediate Level	85.07
Grand Total	**77.04**

The highest average price by levels of web development courses goes to the "intermediate level", while the "Expert level" has the least average price.

Fig 4b:

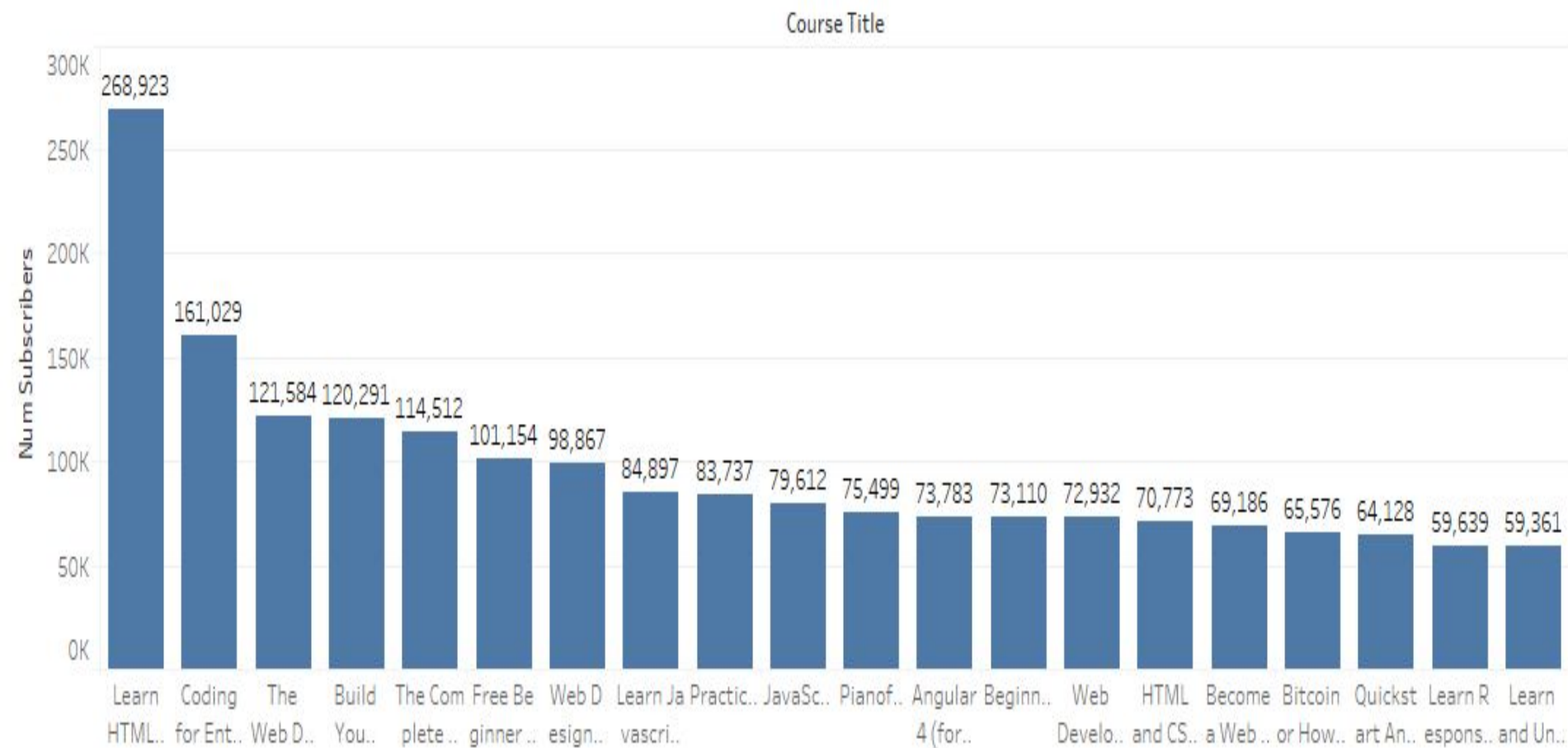Average Price of Web Development Courses at Different levels

5. What are the 20 most popular courses?

1. Learn HTML5 Programming From Scratch

2.Coding for Entrepreneurs Basic

3.The Web Developer Bootcamp

4.Build Your First Website in 1 Week with HTML5 and CSS3

5.The Complete Web Developer Course 2.0 ONLINE

6.Free Beginner Electric Guitar Lessons

7.Web Design for Web Developers: Build Beautiful Websites!

8.Learn Javascript & JQuery From Scratch

9.Practical PHP: Master the Basics and Code Dynamic Websites

*10.*JavaScript: Understanding the Weird Parts

11.Pianoforall - Incredible New Way To Learn Piano & Keyboard

12.Angular 4 (formerly Angular 2) - The Complete Guide

13.Beginner Photoshop to HTML5 and CSS3

14.Web Development By Doing: HTML / CSS From Scratch

15.HTML and CSS for Beginners - Build a Website & Launch

16.Become a Web Developer from Scratch

17.Bitcoin or How I Learned to Stop Worrying and Love Crypto

18.Quickstart AngularJS

19.Learn Responsive Web Development from Scratch

20.Learn and Understand AngularJS

Plot of top 20 courses with their respective number of subscribers

Course Title

Learn HTML..	Coding for Ent..	The Web D..	Build You..	The Com plete ..	Free Be ginner ..	Web D esign..	Learn Ja vascri..	Practic..	JavaSc..	Pianof..	Angular 4 (for..	Beginn..	Web Develo..	HTML and CS..	Become a Web ..	Bitcoin or How..	Quickst art An..	Learn R espons..	Learn and Un..
268,923	161,029	121,584	120,291	114,512	101,154	98,867	84,897	83,737	79,612	75,499	73,783	73,110	72,932	70,773	69,186	65,576	64,128	59,639	59,361

course_title	level	free or paid	free_beginner	content_duration
Learn HTML5 Programming From Scratch	Beginner Level	free	yes	10.5
Coding for Entrepreneurs Basic	Expert Level	free	no	3.5
The Web Developer Bootcamp	Beginner Level	paid	no	43
Build Your First Website in 1 Week with HTML5 and CSS3	All Levels	free	no	3
The Complete Web Developer Course 2.0	Beginner Level	paid	no	30.5
Free Beginner Electric Guitar Lessons	All Levels	free	no	4.5
Web Design for Web Developers: Build Beautiful Websites!	All Levels	free	no	3
Learn Javascript & JQuery From Scratch	All Levels	paid	no	2
Practical PHP: Master the Basics and Code Dynamic Websites	Intermediate Level	free	no	6.5
JavaScript: Understanding the Weird Parts	All Levels	paid	no	11.5
Pianoforall - Incredible New Way To Learn Piano & Keyboard	Beginner Level	paid	no	30
Angular 4 (formerly Angular 2) - The Complete Guide	Beginner Level	paid	no	22
Beginner Photoshop to HTML5 and CSS3	All Levels	free	no	2
Web Development By Doing: HTML / CSS From Scratch	All Levels	free	no	1
HTML and CSS for Beginners - Build a Website & Launch ONLINE	All Levels	free	no	6
Become a Web Developer from Scratch	All Levels	paid	no	27.5
Bitcoin or How I Learned to Stop Worrying and Love Crypto	All Levels	free	no	8
Quickstart AngularJS	Beginner Level	free	yes	1.5
Learn Responsive Web Development from Scratch	All Levels	free	no	4.5
Learn and Understand AngularJS	Beginner Level	paid	no	7

6. Does content duration impact the price of the course?

Scatter Plot for Content Duration vs Course Price
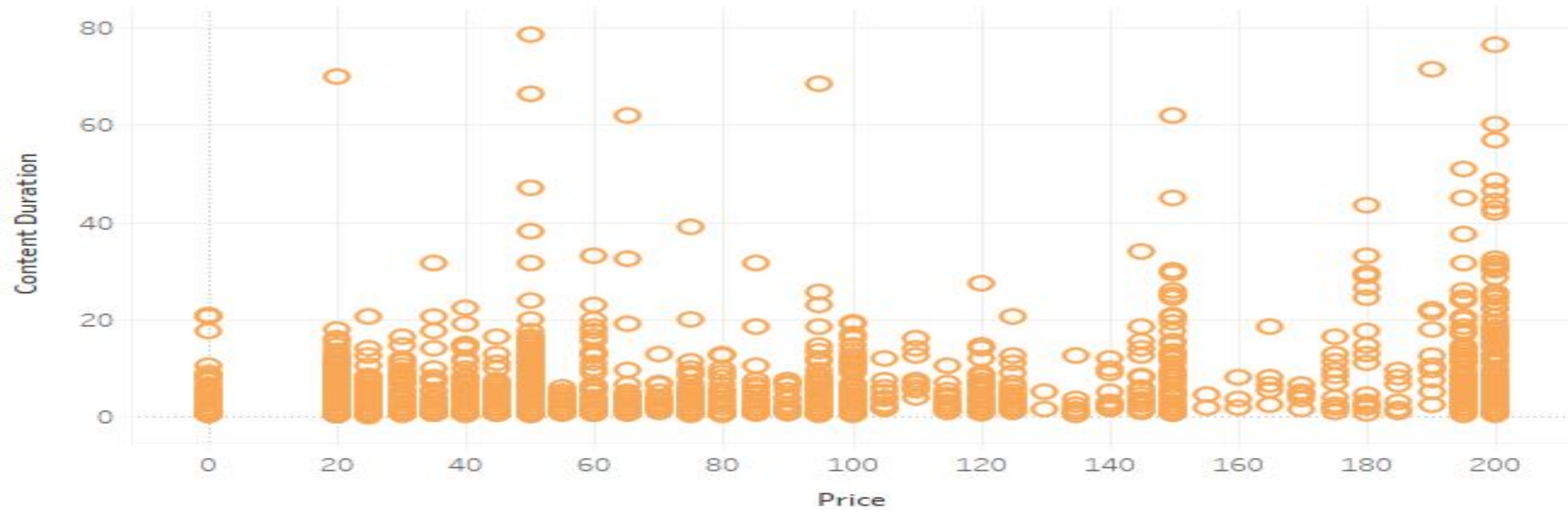
It is observed that for all range of prices, majority of the course content durations fall between 0 - 20 hours. Also, no direct correlation is observed between course content durations and course prices.

Summary

Summary of findings:

- ***Top 5 courses:***

  - *Almost 68% of subscribers come from Web Development and the top 5 courses are for Web development as well*

- ***Business Finance vs Web Development:***

  - *Business Finance and web development have almost equal number of total courses (1155 vs 1203), but web development course are almost 2x in content duration and have 4x the average subscribers.*
  - *Both web development and business finance have almost equal average prices, and their total number of paid courses are almost the same.*

- ***Course Pricing:***

  - *Web development intermediate level courses has the highest average price, followed by the beginner level, all level, then the expert level in decreasing order.*
  - *Overall web development course has the highest average price, followed by business finance, graphic design, then musical instruments.*
  - *There isn't much evidence to say that the price is directly related to course content duration.*

Actions & Recommendations

Recommended actions:

Product recommendations:

- *Focus on getting more paid course by creators in web development in order to boost revenue income. Currently, our data tells that web development has the highest number of subscribers.*

Marketing recommendations:

- *Our data tells us that our web development courses are most popular and people are willing to pay for it. Marketing and advertising campaigns should therefore be focused on business finance courses because it has almost the same average price and total number of paid courses with web development, yet it is less popular.*

Thank you!