University of Halabja

College of Science

Computer Science Department

# Report about

# web developer and mobile application developer

# prepared by

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# Problem idea

In this report, we take two of the most common programming jobs, web developer and mobile application developer, which are in high demand, as we see many posts on social media every day asking how much they pay. And am I the right age to learn? And many other questions. We started collecting information about both types through a survey questionnaire. We were able to get the opinions of many developers and get answers to each of these questions.

1. Is there a relationship between being an employee and age?
2. Is there a connection between hobbies and being a developer?
3. Is there a relationship between age and salary?
4. Do age and satisfaction have anything to do with becoming a developer?
5. Do age and salary have anything to do with education?
6. Are age and salary related to satisfaction?

# Dataset collection

We have tried to use new and unused data collected through survey questionnaires and have started by asking some questions that are necessary for the analysis

**Questions:**

1. are you a web developer or a mobile application developer?

2. What is your level of education?

3. How old are you?

4. Are you currently employed?

5. What is your current salary range?

6. are you satisfied with the field of your work?

7. What do you spend most of your spare time with?

# Methodology

After collecting the data we will put it into an excel file so that we can read it and use it in the program after reading the file we will delete the extra fields if any as here we have Full name and Timestamp and we don't need it and we will delete it, Then we delete any duplicate data and then start analyzing the data to better understand it and gain more information, In the initial stage which is the pre-processing stage here we have used normalization and the future selection and dimension reduction,

- By using normalization, the dataset's numerical columns can have their values converted to a common scale without the data being lost or distorted.
- future selection for filtering the important data and removing the data unimportant like full name and time stamp we are removed because unimportant
- As we can see from the association between age, pay, and happiness, dimension reduction is a strategy used to reduce data from a high-dimensional space into a low-dimensional space.

After that, in the post-processing phase, we used communication to carefully observe how the data related to each other. To articulate our information, we used visualization to make it easier to understand and use the information.

# Result

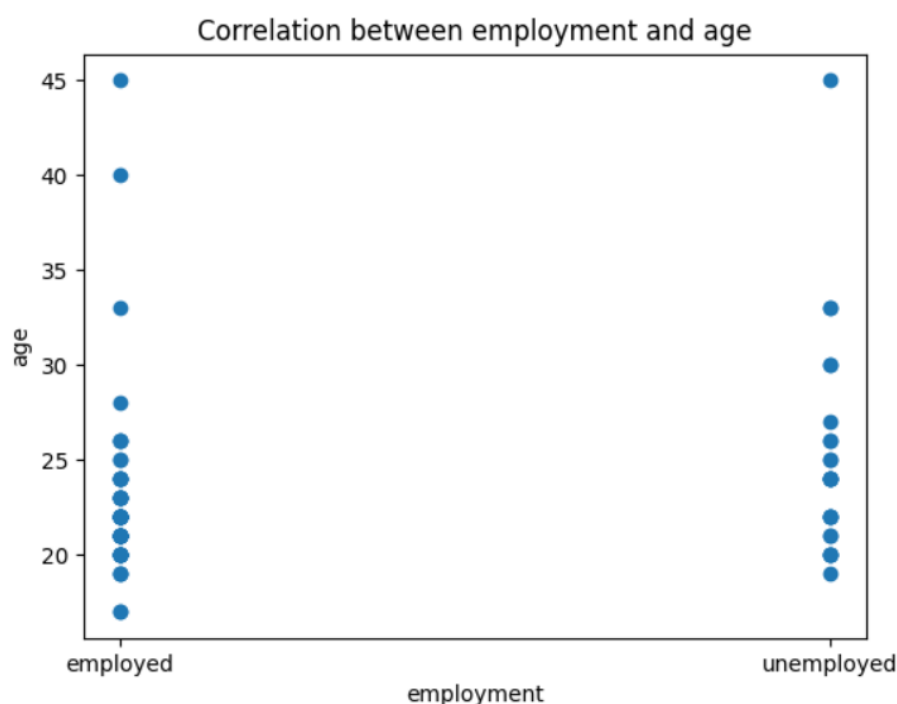After data mining and discovering connections between the data.
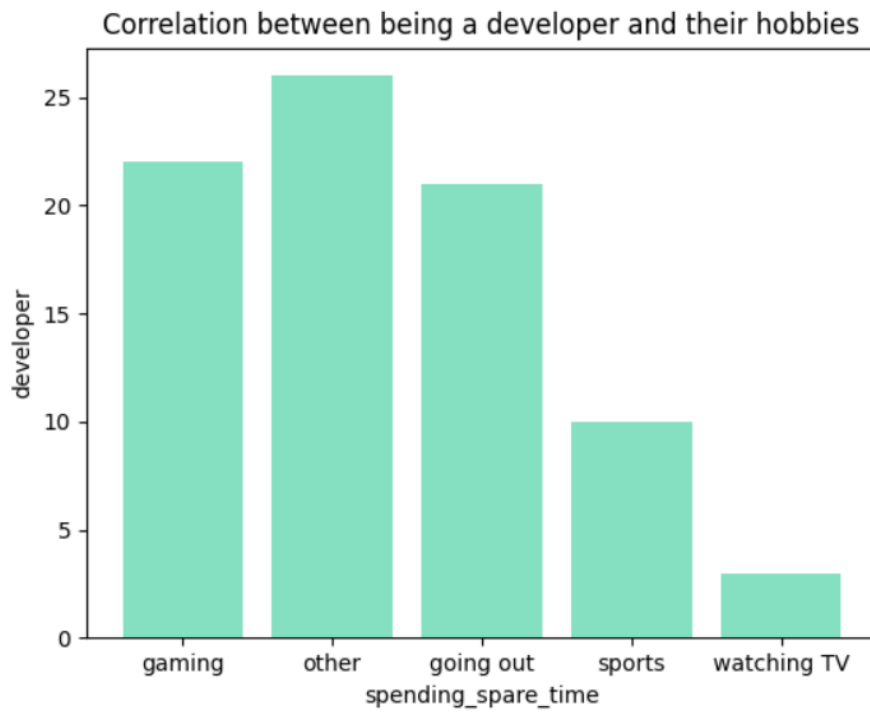


*Figure 1 – employment and age*
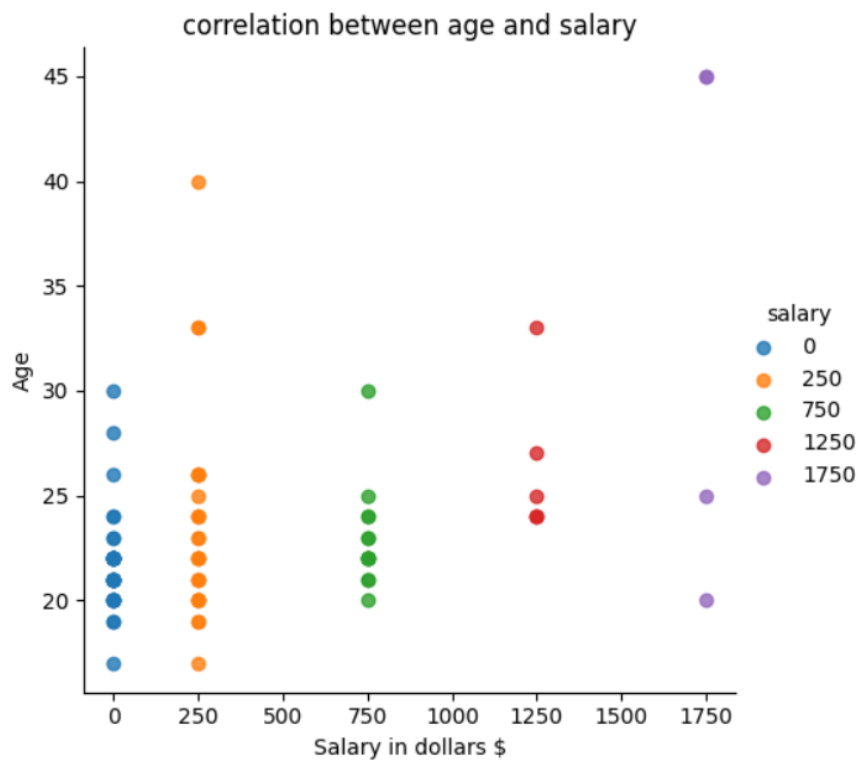
*Figure 2 -Developers and their hobbies*



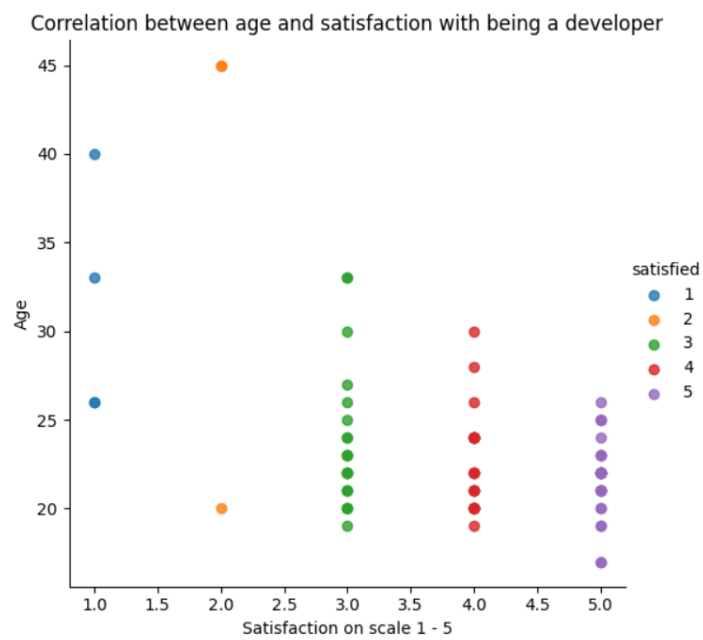*Figure 3 – age and salary*

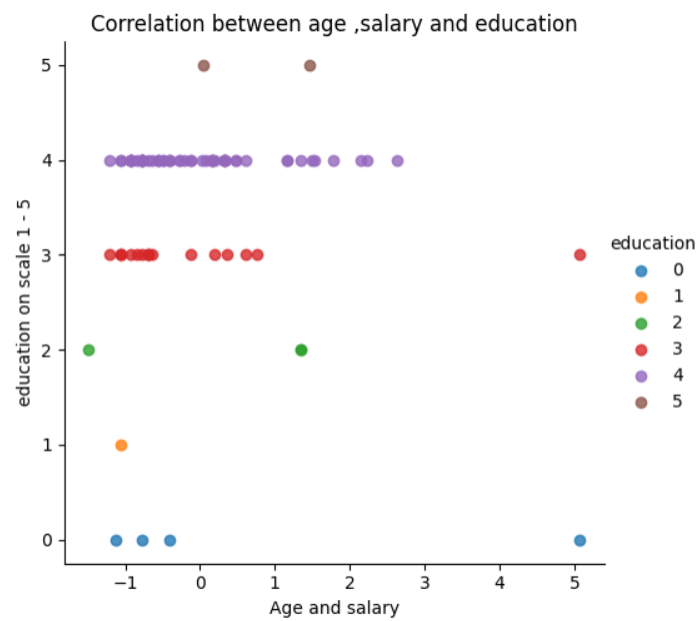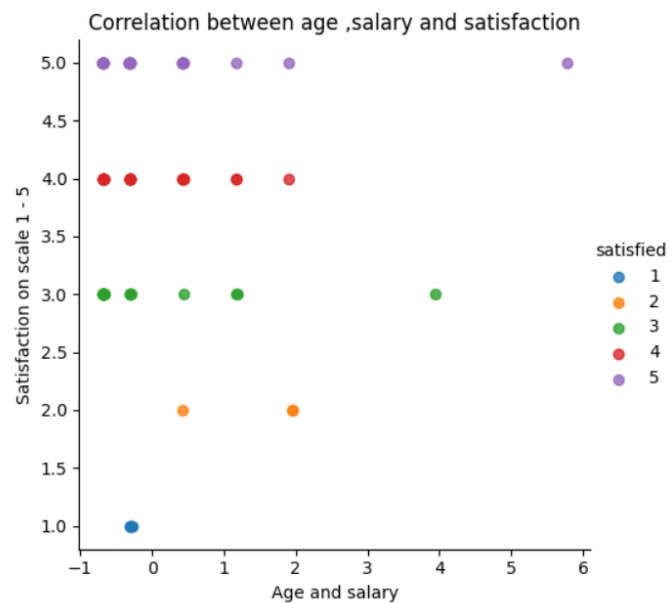*Figure 4 – age and satisfaction with being a developer*



*Figure 5- age, salary and education*



*Figure 6 - age , salary and satisfaction*