KIDS & TEENS FREELANCING TRAINING

Big Data Certification Course Outline

MODULE 1: What is Big Data?

- What is data? What makes data "big"?
- Examples: YouTube views, online games, weather apps
- Structured vs unstructured data (explained with cartoons)
- Fun analogy: Big data is like a huge Lego world of information!

MODULE 2: Where Does Data Come From?

- Data sources: social media, games, shopping, sensors
- Real-world examples (e.g., Fitbit, Roblox, YouTube)
- Activity: Where did *you* create data today?
- Discussion: What is "good" and "bad" data?

MODULE 3: How Do We Store Big Data?

- Databases and cloud storage (Google Drive, iCloud)
- What are rows, columns, and tables?
- Simple intro to spreadsheets and CSV files
- Create a mini table of favourite items

MODULE 4: Exploring and Sorting Data

- Find patterns, errors, duplicates
- Use filters and sorts in Google Sheets or Excel
- Activity: Organize a jumbled dataset (like favourite fruits or movies)
- Why clean data is important

MODULE 5: Visualizing Big Data

- Bar charts, pie charts, line graphs
- Use Google Sheets or Canva to visualize
- Activity: Make a chart about your class's favourite snacks
- Why visuals make data easier to understand

MODULE 6: Big Data and Privacy

- What is personal data?
- How apps track your behaviour (in a safe way)
- Why data should be protected
- Privacy pledge activity: "I protect my data!"

MODULE 7: Big Data in AI & Everyday Life

- How AI uses big data to make decisions
- Real-life uses: Netflix suggestions, Google Maps, ads
- Kid-friendly case study: How YouTube recommends videos
- Group discussion: How big data helps and harms

MODULE 8: Mini Big Data Project & Presentation

- Choose a dataset (e.g., favourite pets, daily steps, fruit sales)
- Organize it into a table
- Visualize it with graphs
- Present findings to the class or family