

YOUTH DIGITAL CURRENCY PROGRAM (YDCP)

TEMASEK POLYTECHNIC x SECONDARY SCHOOLS



Established in 1990

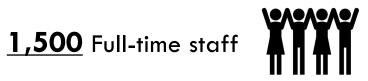


<u>6</u> Academic Schools



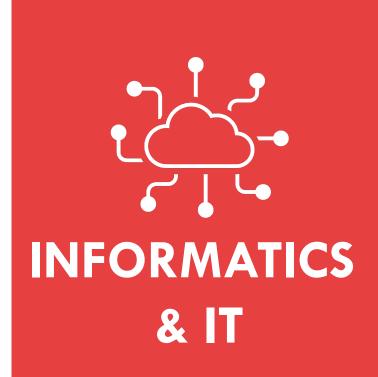
40 Full-time courses





- **MOE Full Qualification** Courses
- Work-Study Programmes
- Short & Customised Courses
- Micro-Learning Courses

ABOUT US







- Common ICT Programme
- Applied Artificial Intelligence
- Big Data and Analytics
- Cybersecurity & Digital Forensics

- Immersive Media & Game Development
- Information Technology



CENTRES OF EXCELLENCE

- Agile IT Solutions Centre
- Innovation & Research Centre
- TP-Nvidia Al Technology Centre
- TP-SAS Business Intelligence & Analytics Centre

- Data Science Hub
- App Experience Hub
- Temasek Advanced Learning,
 Nurturing and Testing Laboratory
- Malware Analysis Lab
- Al Application Center



AI & ANALYTICS

Everyone is talking about it, but what is it?

Have you ever wondered?

- How social media knows what you want?
- How shopping malls make dead corners vibrant again?
- How a coffee chain knows what the most popular drink among teens is?
 - How do the chatbots around you work?



AI & ANALYTICS

Most companies are collecting data in all forms but in raw form, and it doesn't mean anything.

This is where Al & Analytics come in.









Temasek POLYTECHNIC

OBJECTIVES



- Identify young IT talents
- Enhance the digital currency of youths through applied learning
- Expand youth's competencies
- Build portfolio in digitalization skills

YDCP CURRICULUM (120 hours)



HOURS	CONTENT TO BE TAUGHT
40	Data Analytics
60	Web Development
20	Course Work Assessment

- Blended learning
 - Online, Secondary School & Temasek
 Polytechnic
- Wednesdays during term time
- March, June, Sep and Nov school holidays
- ECG and Learning Journeys to ICT companies



TOPICS (120 hours)

Some of the Topics

Data-driven approach to decision making

Data Gathering

Data Profiling

Exploratory Data Analysis

Data Preparation

Data Visualization

Predictive Analytics

Artificial Intelligence

UI/UX

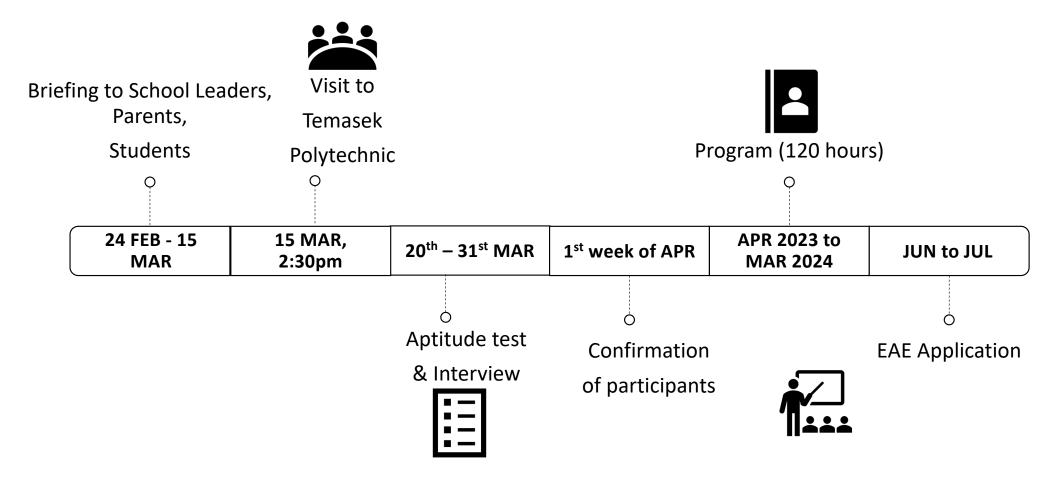
Prototyping and Wireframes

Computational Thinking

HTML, CSS, Forms and Web Design

Basic Web App Development using Python

TIMELINE



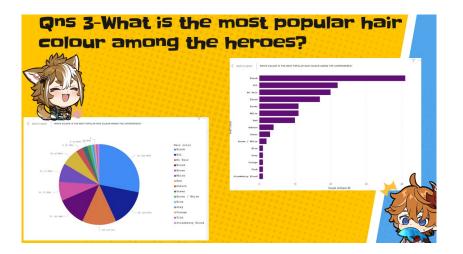


SOFTWARE & ARDWARE REQUIREMENTS

- Students should have their own laptop
 - TP staff will help with the installation of software at the start of the programme
- Software needed:
 - Analytics:
 - Power BI
 - Web Development:
 - Adobe XD, Visual Studio Code

STUDENT DATA ANAYTICS PROJECT SCREENSHOTS

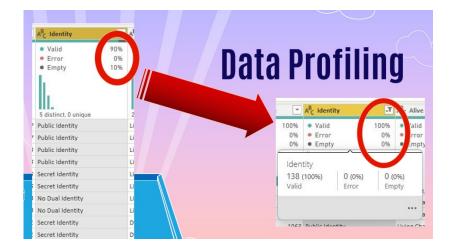
(Using PowerBI)





Asking the right question is critical.

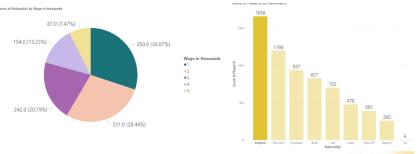
Data profiling in action



STUDENT DATA ANAYTICS PROJECT SCREENSHOTS

(Using PowerBI)



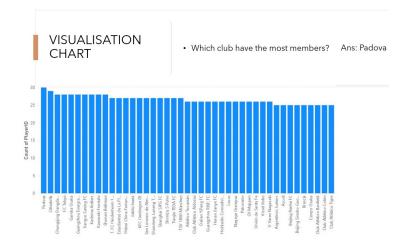


Visualizing the profile of football players

From the pie chart above, there are 1164 football players with wages in thousands less than or equals to 5. While there are 1658 players from England as seen in the bar graph above.

Thus we can conclude that the statement "Most players from England have a wage of 5000 dollars and below" is true as there is 70.2% of players with a wage of 5000 and below.

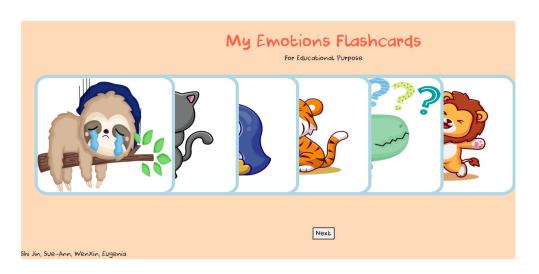
Football clubs and its members





STUDENT WEB DEVELOPMENT PROJECT SCREENSHOTS

(Using Adobe XD, Visual Studio Code)







Q & A SESSION