

Briefing of Group Project


C05237 Healthcare Analytics

Learning Objectives

- Explain the key steps in a healthcare analytics project
- Know the fundamental data analytics concepts and techniques needed in healthcare analytics
- Analyze healthcare data with the appropriate tools
- Abstract insights from analytical findings to address healthcare problems
- Communicate and present analytical findings effectively through a written report and presentation
- Work effectively in a team environment

Project Requirement

- Form a team with 4 to 5 members
- Pick a healthcare problem
- Address the problem via data analytics
- Present your findings

Team Role	Contribution	Allowable Weaknesses
Plant 	Creative, imaginative, free-thinking. Generates ideas and solves difficult	Ignores incidentals. Too preoccupied to communicate

What's Your Personality Type?

Use the questions on the outside of the chart to determine the four letters of your Myers-Briggs type.
For each pair of letters, choose the side that seems most natural to you, even if you don't agree with every description.

1. Are you outwardly or inwardly focused? If you:

- Could be described as talkative, outgoing
- Like to be in a fast-paced environment
- Tend to work out ideas with others, think out loud
- Enjoy being the center of attention

then you prefer
E
Extraversion

- Could be described as reserved, private
- Prefer a slower pace with time for contemplation
- Tend to think things through inside your head
- Would rather observe than be the center of attention

then you prefer
I
Introversion

2. How do you prefer to take in information? If you:

- Focus on the reality of how things are
- Pay attention to concrete facts and details
- Prefer ideas that have practical applications
- Like to describe things in a specific, literal way

then you prefer
S
Sensing

- Imagine the possibilities of how things could be
- Notice the big picture, see how everything connects
- Enjoy ideas and concepts for their own sake
- Like to describe things in a figurative, poetic way

then you prefer
N
Intuition

3. How do you prefer to make decisions? If you:

- Make decisions in an impersonal way, using logical reasoning
- Value justice, fairness
- Enjoy finding the flaws in an argument
- Could be described as reasonable, level-headed

then you prefer
T
Thinking

- Base your decisions on personal values and how your actions affect others
- Value harmony, forgiveness
- Like to please others and point out the best in people
- Could be described as warm, empathetic

then you prefer
F
Feeling

4. How do you prefer to live your outer life? If you:


- Prefer to have matters settled
- Think rules and deadlines should be respected
- Prefer to have detailed, step-by-step instructions
- Make plans, want to know what you're getting into

then you prefer
J
Judging

- Prefer to leave your options open
- See rules and deadlines as flexible
- Like to improvise and make things up as you go
- Are spontaneous, enjoy surprises and new situations

then you prefer
P
Perceiving

ISTJ Responsible, sincere, analytical, reserved, realistic, systematic. Handworking and trustworthy with sound practical judgment.	ISFJ Warm, considerate, gentle, responsible, pragmatic, thorough. Devoted caretakers who enjoy being helpful to others.	INFJ Idealistic, organized, insightful, dependable, compassionate, gentle. Seek harmony and cooperation, enjoy intellectual stimulation.	INTJ Innovative, independent, strategic, logical, reserved, insightful. Driven by their own original ideas to achieve improvements.
ISTP Action-oriented, logical, analytical, spontaneous, reserved, independent. Enjoy adventure, skilled at understanding how mechanical things work.	ISFP Gentle, sensitive, nurturing, helpful, flexible, realistic. Seek to create a personal environment that is both beautiful and practical.	INFP Sensitive, creative, idealistic, perceptive, caring, loyal. Value inner harmony and personal growth, focus on dreams and possibilities.	INTP Intellectual, logical, precise, reserved, flexible, imaginative. Original thinkers who enjoy speculation and creative problem solving.
ESTP Outgoing, realistic, action-oriented, curious, versatile, spontaneous. Pragmatic problem solvers and skillful negotiators.	ESFP Playful, enthusiastic, friendly, spontaneous, tactful, flexible. Have strong common sense, enjoy helping people in tangible ways.	ENFP Enthusiastic, creative, spontaneous, optimistic, supportive, playful. Value inspiration, enjoy starting new projects, see potential in others.	ENTP Inventive, enthusiastic, strategic, enterprising, inquisitive, versatile. Enjoy new ideas and challenges, value inspiration.
ESTJ Efficient, outgoing, analytical, systematic, dependable, realistic. Like to run the show and get things done in an orderly fashion.	ESFJ Friendly, outgoing, reliable, conscientious, organized, practical. Seek to be helpful and please others, enjoy being active and productive.	ENFJ Caring, enthusiastic, idealistic, organized, diplomatic, responsible. Skilled communicators who value connection with people.	ENTJ Strategic, logical, efficient, outgoing, ambitious, independent. Effective organizers of people and long-range planners.

Specialist 	Single-minded, self-starting, dedicated. Provides knowledge and skills in rare supply.	Contributes only on a narrow front. Dwells on technicalities.
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After Forming Your Team

<http://tinyurl.com/zmqbp6p>

How **Not** to Pick Your Topic

- Not to cure cancer
 - Be realistic
- Not to prove smoking causes lung cancer
 - Pick something interesting and less obvious
- Not to address acute and critical care in space
 - Lack of data
 - Lack of relevant background

Assessment and Deadlines

- **Project proposal (10%)**
 - **5th of Feb** Submit a 1 page report on the preliminary problem statement and approach based on the discussion with the professors.
 - **26th of Feb** Submit a clear and concise 3-5 pages report
- **Project finding (10%)**
 - **25 Mar** Submit a report on the preliminary results. ii. Milestone
 - **8 Apr** Submit a full report on the finalized results, and the discussion and conclusion.
- **Group Presentation (10%) 15 Apr**
- **Peer review (10%) 15 Apr**

Tips

- Source of Data
 - MIMIC-III
 - <http://www.sunlab.org/teaching/cse8803/data/>
- Example of healthcare Analytics
 - <http://lcp.mit.edu/pdf/HsuChest15.pdf>
- Most importantly
 - Try to bother the three lecturers of the course as much as you can