



Project Briefing and Team Formation

iRail Enterprise Project - Lesson 1

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- Discover careers in the rail industry

 Complete a series of team ch = " Complete a series of team challenges

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Project Brief

Over a series of 5 sessions, you will design a new railway station to be called at by Porterbrook's HydroFLEX as well as other trains.

You will need to consider:

>>>>> The location of the station

>>>>> The customers and their needs ATIVE PURPOSES ONLY

- >>>>> Innovations in the rall industry
- >>>>> The budget and layout of the station









- HydroFLEX is a repurposed 30year-old train.
- It is the world's first tri-mode train – it can operate on electric, battery and hydrogen power!
- It is emission free, and tables, workshops and seats are made from recycled materials.
- Top speed 100mph.











Team Formation

- Working in teams of 3-5
- Using the project submission, establish your team identity
- Identify who will take on each project role:

Project Manager

Responsible for planning and execution of the project.

Vital skills:

Leadership, communication

Market Researcher

Gathers information from current and past ideas.

Vital skills:

Time management, Problem solving

Designer

Creates visual assets to show how the project will look.

Vital skills:

Creativity, listening

Admin and

Finance
Responsible for the monetary aspects of the project.

Vital skills:

Problem solving, teamwork

Marketer

Promote the project to members of the public.

Vital skills:

Creativity, presenting









Careers in Rail

Project Manager - Plan and organize people, tasks and resources to complete a project on time and within budget

Click here for videos from people in the rail industry!

Data Scientist – Uses coding and statistics to analyse information to assist with developing company strategies

Human Resources Officer - Hire, develop and look after employees in a company

Textiles Designer - Create fabric designs and patterns for woven, knitted and printed materials for clothes and interior furnishings

Marketer - Plan how to promote products, services or brands and oversee all marketing activity









Location, Location, Location iRail Enterprise Project Postesson 2

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Jobs Linked to Route Planning

For each job that appears on the screen, you will have 1 minute to discuss with your teame USED and try to establish what they do within their role!

What skills do you think they will need to

use?







Jobs Linked to Route Planning

ROUTE PLANNER

Considers infrastructure and geographical landscape to choose the best route. They often work with the engineers and environmental specialists.

SAMPLE MATERIALS

Key Skills: Communication, Teamwork, Problem Solving









Jobs Linked to Route Planning

ECOLOGIST

Explores how the local environment will be affected. Studies both plants and animals to establish any changes in biodiversity before, during and after the construction of the new route

Key Skills: Staying Positive, Problem Solving, Creativity









Route Planning Challenge

Plan a route to extend an existing trainline.

Within the time limit, as a team you need to:

- Draw your route on the map using the information provided to work out the cost of consi your new trainline.

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- Consider the environmental impacts of building the new trainline
- Answer the questions about the target market for your new station

Pages 6 -10

You have 40 No minutes. Make sure to consider your time management skills as a team!











Future Thinking

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- >>>>> Understand the concept of innovation how it is important in the rail industry.
- >>>>>> Understand the concept of sustainability and its connection to the built environment and to transport solutions in the rail industry.
- >>>>> Demonstrate a good level of teamwork and communication skills to complete a challenge.





What is Innovation? TO BE USED What is usually purposes only - Not To Sample MATERIALS FOR STRATIVE PURPOSES ONLY - NOT TO SAMPLE MATERIALS FOR STRATIVE PURPOSES ONLY - NOT TO SAMPLE MATERIALS FOR SAMPLE FOR S

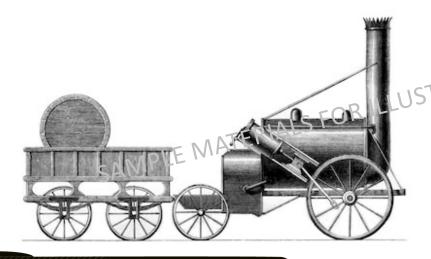






Innovation in Rail

George Stephenson's 'Rocket' train travelled at a record breaking **28pmh**.



Japanese bullet train holds a record speed of **375mph**.









Innovation in Rail

Innovation is the practical implementation of ideas that result in new or improved goods or services.















You are working towards designing a station to be called at by **Porterbrook's HydroFLEX trains.**

Discuss and explore new technologies that could be some within your station design to improve customer or employee experience.

Use the mind man to write

Use the mind map to write down your initial ideas.

The product you design will be used in your project presentation







As a team create a mood board tourposes only represent the colours, material lives feel you intend to feel you intend to use in the rest of your station design E

The product you design will be used in your project









Designing Your Station

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Project Brief

Using what you have learnt in the previous sessions:

Design a new railway station to be called at by

Porterbrook's HydroFLEX trains.

Space in big cities is highly sought after and in demand. That means companies such as Network Rail need to develop transport hubs. This involves building upwards on an existing station, adding developments that would be beneficial for the civic ecosystem as well as considering the impact on the environment.







The station must be suitable for all rail users.

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Using your station will be:

- Commuters
- Workers
- People with disabilities
 Adults ONLY









Design Your Station

TASK: Design a multi-purpose over station space that is suitable for all rail users.

The space should be multi-purpose with very options for this to change as the needs of the community change. RIALS

You must also consider issues of access and make sure the space is accessible for all.

Budget: £5,000,000

In the next session you will present your floor plans along with your innovative product and mood board to the class!

Good luck!











Project Presentations

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Presentation Skills

Dos and Don'ts

Talk immediately

Make eye contact

Look at the floor when you're not speaking

Jourself Jou

Use list of three

Don't worry if it goes wrong

Mumble to your teammates









Planning Your Presentation

You are going to pitch your project to

Explain your developed ideas, design, • Keep it sir and **ethos** behind their new rail station. MATERIALS

Consider:

- Target audience
- Body Language
- Keep it simple and
- Practise!





