Sky Graduate Bootcamp

Case Study : Project Brief

September – November 2025

Contents

[1. Welcome to your case study briefing 1](#_Toc203572070)

[1.1. Working methods 1](#_Toc203572071)

[1.2. Cross functional teams 1](#_Toc203572072)

[1.3. The Showcase – what to expect 2](#_Toc203572073)

[1.4. Technologies 2](#_Toc203572074)

[1.5. Artefacts 2](#_Toc203572075)

[2. Case study objectives 3](#_Toc203572076)

[3. Tips for a good project 3](#_Toc203572077)

# Welcome to your case study briefing

This document will run you through how the case study project will run, what are the roles and expected deliverables, how to approach the project and the applications we are proposing that you work on. You are provided with six case study objectives for your team to select from and, in case you need it, an outline how to pitch a new idea we haven’t thought of.

The case study project commences at the end of Week 1 of your ten-week bootcamp. You are not expected to start coding immediately; team formation, ideation, planning, and research should be your first tasks. You have been allocated sections of time throughout bootcamp to enable you to work on your project in your teams. However it is expected that you will schedule additional time throughout your bootcamp learning days and self-study days to work on project tasks.

Reading this document thoroughly will help you be successful in the final showcase event which closes the graduate bootcamp.

## Working methods

Throughout this project, your team should use Agile practices. You should assign a Scrum Master for each sprint. You should practice pair-programming where appropriate and incorporate a robust testing plan into your development schedule. You must conduct rituals such as daily stand-ups, sprint planning, sprint reviews and retrospectives.

For the duration of the project, you will showcase your daily/weekly progress to your instructor, discussing the outcomes of your reviews and retrospectives, including any action points identified during these rituals.

By a process of continual assessment and involvement, your instructor will ensure that each member of the team contributes in each of the key areas of development.

## Cross functional teams

Each project team will be comprised of graduates from the three cohorts which are running side by side, including members of both expertise streams – Super Tech and Hybrid Engineering. This means that your team will be **cross functional** – by design your individual skills, strengths and experience will be different to those of others in your team. You may also have a Cyber Graduate in your team. Between you, you should ensure that all facets of the brief are completed to a good standard.

One big difference to how a team might work in a BAU setting is that in this case study project **each team member must contribute** to the final presentation, must evidence their contribution to the team and you must also rotate the responsibilities of running the team between you, so that everyone in the team has experienced what its like to be the scrum master for a sprint. You should endeavour to share and rotate team responsibilities wherever feasible to ensure you gain hands-on experience with as many roles as possible and therefore increase your future opportunities within Sky.

It is expected that working in a large team will lead to a bit of frustration and friction, but you should all proactively work on maintaining a successful collaboration environment, be respectful and considerate, and ultimately take responsibility for the successful outcome.

## The Showcase – what to expect

The Showcase will take place at the Osterley campus on the final Thursday of the bootcamp. All teams will present to invited Sky stakeholders and previous Academy alumni. These formal presentations given by each team in turn, will take place in the Sky Cinema and last around 20 minutes, followed by a Q&A.

The presentation will include an outline of the problem, methodology, technologies employed, and demonstration of the product. This last part is very important – the audience you present to will expect to be able to use and interact with the product you develop. Consider how you will engage with your audience during the showcase and whether you can introduce functionality / features into your application to make the demonstration interactive. Imagine something like asking your audience to fill in some information on the page and receiving a personalised set of recommendations back.

You will be presenting to potential future mentors, line managers and other business stakeholders so keep in mind that some of your audience may be non-technical when thinking through your script or talking points.

## Technologies

The below is a non-exhaustive list of the technical applications each team is expected to use to complete the case study:

* You are encouraged to use AI applications include code generation tools and GenAI troubleshooting tools throughout your project.
* The core technology to be used for the back-end is Java or Python.
* The core technology to be used for the front-end is JavaScript / ReactJS.
* You can choose from an extensive tech stack to emulate Sky’s development practices, including frameworks, libraries and styling.
* Each team should capture and store their traffic and page interaction data in a purpose-built relational SQL database. The interface between backend and database can be any appropriate CRUD.
* You should produce data visualisations analysing test scenario data in that database using python libraries.
* Your presentation will be delivered in a slide tool – any web based or local application for presentations can be used. Think about using co-pilot to produce a visually compelling slide deck. Think bright engaging design, storytelling skills and you should limit how much text and detail you display on each slide.
* Your product will need to be deployed to the cloud and you will be provided with an AWS login to set up any resources you require for this purpose. You will need to proactively limit and control the cloud-spend of your team.

## Artefacts

The following artefacts will be naturally produced during your work on the case study and these should be stored in such a way so they are visible to your instructor:

* List of stakeholders
* Requirements analysis
* Design documentation, such as ERDs, class diagrams and wireframes
* Development breakdown or backlog
* Technical specifications
* Test methodology and results
* Scrum boards, retrospective and product reviews

# Case study objectives

## MVP goals

In the below table you will find the case study objectives your team can choose from. Each case study definition has been defined based on a SKY Impact strategic goal. It does not matter if a similar product currently exists in real life – the purpose is to develop your own MVP as a team.

An MVP is defined as the minimum viable product that can be released to early users. It includes just enough features to be usable and to gather feedback for future development phases. Set a relatively low bar for your first project iteration, then try to reach that first iteration quickly. It doesn't have to look nice. But the idea is: You will now build on that and maybe answer an extended question in the remaining time.

It is advisable you develop an MVP before the end of week 6.

|  |  |  |
| --- | --- | --- |
| Sky Goal | Outline | Potential features list |
| Sky Zero A | Build a web-based dashboard application that allows Sky employees to track and reduce their individual carbon footprints at work — with insights on commuting, travel, energy usage, and sustainability challenges. | Simple onboarding questionnaire (e.g., commute method, remote days).  Personal carbon impact calculator based on responses.  Tips and challenges (e.g., “Bike to work week”, “No-print day”) with any kind of gamification.  Team leaderboard to encourage friendly competition.  Monthly reports to show collective progress across departments.  + Back end relational database that stores the questionnaire input, all user interactions and personal data captured, and web page traffic. |
| Sky Zero B | Develop a public-facing website that shows Sky customers how to reduce their environmental impact, both while using Sky services (like set-top boxes) and in daily life. | Carbon impact information on common devices (e.g., Sky Q vs Sky Stream).  Energy-saving tips (e.g., setting boxes to Eco mode, unplugging habits).  Eco-content recommendations (TV shows, documentaries on climate).  Lifestyle challenges (e.g., meat-free week, energy-saving pledges).  Shareable achievements and progress tracker.  + Back end relational database that stores limited personal data with progress tracking and achievements, all user interactions and web page traffic. |
| Sky Up A |  |  |
| Sky Up B |  |  |
| Sky Cares A |  |  |
| Sky Cares B |  |  |
| Sky Project X |  |  |

## Two further iterations of your product

## Stretch objectives

# Tips for a good project

* **Breadth and depth:** You should use this project to try out techniques you have seen in the lessons and to explore related concepts in greater depth. You will work on this case study at your own pace– but keep in mind that it will be more beneficial for your team to complete a less ambitious product at a higher quality, rather than rushing through too many features at 50%.
* **Ask for help:** Throughout the bootcamp you will encounter experts in their field who are training and coaching you in their area of expertise. Be proactive in asking them questions about your project during the training session Q&A opportunities, as well as using your bootcamp instructor as a sounding board and go to for technical help.
* **Collaborate:** There is no “correct way” or prescriptive steps in which you must meet your case study brief. Diversity amongst project approaches will naturally arise from individual creativity and differences in interpretation. Listen to the ideas of your teammates and work together to reach compromises wherever you have differing approaches in mind. **REHEARSE** your presentation and demonstrations together to ensure you all feel comfortable delivering your parts, and that any transitions between you are smooth.
* **Organise yourselves**: Set up regular meetings with your team so that you can keep on track of where each person is up to in their tasks, even if this serves as a positive ‘check-in’. Create a repository (GitHub) to collectively save your work to and checkpoint it frequently so if someone misses a day your whole team doesn’t get caught behind. You could also use something like a [Trello](https://trello.com/), [Kanban](https://www.todoist.com/productivity-methods/kanban), [Backlog](https://www.atlassian.com/software/jira/templates/product-backlog-template) or [Scrum](https://resources.scrumalliance.org/Article/scrum-board) board so that you can keep track of your progress, issues and any potential delays. This will ensure that there are no unpleasant surprises when it comes to showcasing your project.
* **Bitesize:** When project deliverables appear overwhelming at first sight, take heed of this ***proverb*** to break down the tasks into smaller pieces….

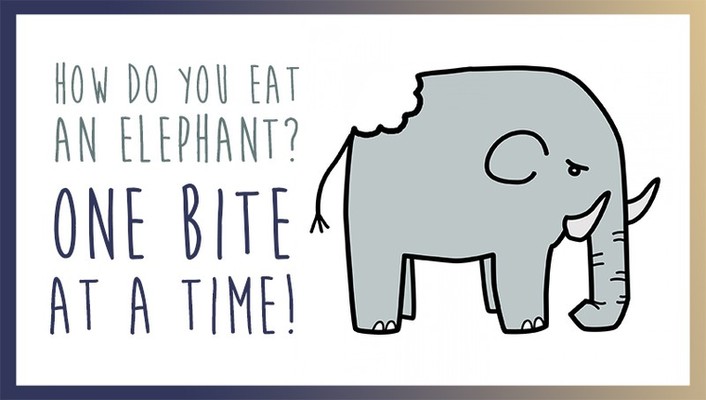


Table 2 – For all colour tint tables, use the style Table heading 2 (black font) for the header row.

|  |  |  |  |
| --- | --- | --- | --- |
| **Table heading 2** |  |  |  |
| Table |  |  |  |
| * Table bullet |  |  |  |

Table 3 - Another tint option.

|  |  |  |  |
| --- | --- | --- | --- |
| **Table heading 2** |  |  |  |
| Table |  |  |  |
| * Table bullet |  |  |  |

A white background with black dots

AI-generated content may be incorrect.