Module 1 Challenge

Start Assignment

- Due Jun 13 by 11:59pm
- Points 100
- Submitting a text entry box or a website url

Background

As an AI professional, it is critical to learn how AI companies start, evolve, and grow, and to be able to speak knowledgeably about the major players in the AI space. Even those in a highly technical role must stay abreast of what is happening in the business landscape, as many AI companies create tools and technologies that are then used by other companies.

One of the key methods used to conduct corporate analysis is the **case study**. Case studies are often 50–100 pages or more, but your task is to create a more focused case study that analyzes how an AI company responds to the problems and needs of the AI field it is in, and how it is using AI technology to solve a standing problem.

In this Challenge, you will:

- Select an AI field that interests you, and then choose a company or project within that field.
- Research the field and company.
- · Write a detailed case study of the company.
- Upload your case study to your Git repository.

This assignment will challenge you to polish your AI research skills by accessing reports, publications, and online resources that AI professionals use to evaluate the industry. It will also help you practice using the AI foundational skills you have learned in this lesson, including GitHub, Terminal, Anaconda, and virtual environments. Finally, it will give you practice presenting and speaking about AI strategy and technology.

Before You Begin

Before starting the challenge, be sure to complete the following steps:

- 1. Create a new repository for this project called (ai-case-study). Do not add this Challenge to an existing repository.
- 2. Clone the new repository to your computer.

Instructions Part 1: Choose a Company (or Project) in an Al Field That You Find Relevant or Interesting.

We covered a number of AI fields in class this week. Consider choosing from the following:

Finance

- Business
- Medicine
- Daily life

Remember that because AI is expected to impact nearly every aspect of our lives, this is by no means a comprehensive list. You are free to choose any field for your case study, as long as it is being disrupted by AI.

Use online research to identify the trends in your field and choose a company that is successful or otherwise interesting to you. For example, if you choose the field of finance, you may want to narrow your search by looking at online journals, periodicals, reports, and websites about the future of wealth management, or how AI is changing or disrupting wealth management.

Your company could be:

- A new, emerging AI company that is doing well in a particular field. Examples include HighRadius, Jasper, Moveworks, OpenAI, and Tempus.
- A large incumbent technology company that is doing something interesting with new, emerging AI technology.
 Examples include Amazon, GitHub, Google, and Microsoft.
- A smaller start-up that is not yet wildly successful, but that you find promising and interesting. This may include an Al company in your local area or a company with a new idea that you would like to learn more about.

Instructions Part 2: Conduct your Research Using the Case Study Template as a Guide.

We recommend that you use the case study template below in order to focus your research. You may lengthen, shorten, or – if necessary – remove sections from the template to accommodate the information available about your company.

NOTE

If you have chosen a project within a larger company (such as Google's Bard), you may want to focus your research on the origins and scope of the project rather than on the company itself.

You may write your case study in a README.md or word processor file and transfer it to GitHub in the next step.

Case Study Template

TITLE

Overview and Origin

- * Name of company
- * When was the company incorporated?
- * Who are the founders of the company?

- * How did the idea for the company (or project) come about?
- * How is the company funded? How much funding have they received?

Business Activities

- * What specific problem is the company or project trying to solve?
- * Who is the company's intended customer? Is there any information about the market size of this set of customers?
- * What solution does this company offer that their competitors do not or cannot offer? (What is the unfair advantage they utilize?)
- * Which technologies are they currently using, and how are they implementing them? (This may take a little bit of sleuthing— you may want to search the company's engineering blog or use sites like Stackshare to find this information.)

Landscape

- * What field is the company in?
- * What have been the major trends and innovations of this field over the last 5–10 years?
- * What are the other major companies in this field?

Results

- * What has been the business impact of this company so far?
- * What are some of the core metrics that companies in this field use to measure success? How is your company performing based on these metrics?
- * How is your company performing relative to competitors in the same field?

Recommendations

- * If you were to advise the company, what products or services would you suggest they offer? (This could be something that a competitor offers, or use your imagination!)
- * Why do you think that offering this product or service would benefit the company?
- * What technologies would this additional product or service utilize?
- * Why are these technologies appropriate for your solution?

Instructions Part 3: Create a Repository and README.md

In this section, you will make a repository on GitHub to store your case study. Then you will write the finished case study report in a markdown README.md file using the above case study template. Your report should be sufficiently long to ensure you provide all relevant information about the company or project in a thorough manner.

Be sure to cite your sources in an addendum at the end of the report. List all websites, podcasts, blogs, or articles that you consulted in order to write the report, and provide links. Your list should be thorough and account for all sources used, but it does not need to be a formal works cited page.

As a final step, take your finished case study and upload it to a repository to share with your instructor and class.

Research Material

As you research your company, you may find these types of resources useful:

- · The company's website
- The company's blog
- Company press releases (These can often be found on the Press page of the company's website, or via Google search.)
- · Websites of competitors
- Al blogs and/or podcasts
- Interviews with the company's founders, CTOs, or project leads
- Reports devoted to the particular field you are focusing on e.g., AI in the finance industry or AI in the medical field

Hints and Considerations

- Remember, the company you select could be a new AI company, a large incumbent technology company, or a smaller start-up. Choose a company that interests you!
- · You can customize the case study template according to the information available about your company.
- Remember to cite all your sources at the end of the report.

Requirements

Company Information and Business Activities (15 points)

- Select a company that utilizes AI technology. (5 points)
- Provide a detailed description of the company's field, audience, solution, and business metrics. (5 points)
- Present company information in a clear and well-organized manner. (5 points)

AI Domain Trends (20 points)

- Communicate a thorough synopsis of trends and landmarks in the chosen Al domain. (10 points)
- Identify several major competitors. (10 points)

Research Depth (10 points)

- Use multiple sources to present a thorough and cohesive view of the company's domain, history, and results. (5 points)
- Specifically quote sources and reference them clearly and accurately. (5 points)

Recommendations (20 points)

Thoroughly explain company recommendations. (10 points)

Base company recommendations in solid research. (10 points)

Report Presentation (35 points)

- Present the report in a README.md file in a GitHub repository. (15 points)
- README.md correctly uses at least one of each of the following:
 - Heading (2.5 points)
 - Font styling (2.5 points)
 - Hyperlink (2.5 points)
 - Block Quote (2.5 points)
- The report style showcases the writer's expertise and builds credibility. (10 points)

Grading

This challenge will be evaluated against the requirements and assigned a grade according to the following table:

Grade	Points
A (+/-)	90+
B (+/-)	80-89
C (+/-)	70-79
D (+/-)	60-69
F (+/-)	< 60

Submission

To submit your Challenge assignment, click Submit, and then provide the URL of your GitHub repository for grading.

NOTE

You are allowed to miss up to two Challenge assignments and still earn your certificate. If you complete all Challenge assignments, your lowest two grades will be dropped. If you wish to skip this assignment, click Next, and move on to the next module.

Comments are disabled for graded submissions in Bootcamp Spot. If you have questions about your feedback, please notify your instructional staff or your Student Success Manager. If you would like to resubmit your work for an additional review, you can use the Resubmit Assignment button to upload new links. You may resubmit up to three times for a total of four submissions.

IMPORTANT

It is your responsibility to include a note in the README section of your repo specifying code source and its location within your repo. This applies if you have worked with a peer on an assignment, used code in which you did not author or create sourced from a forum such as Stack Overflow, or you received code outside curriculum content from support staff such as an Instructor, TA, Tutor, or Learning Assistant. This will provide visibility to grading staff of your circumstance in order to avoid flagging your work as plagiarized.

If you are struggling with a challenge assignment or any aspect of the academic curriculum, please remember that there are student support services available for you:

- 1. Ask the class Slack channel/peer support.
- 2. AskBCS Learning Assistants exists in your class Slack application.
- 3. Office hours facilitated by your instructional staff before and after each class session.
- 4. <u>Tutoring Guidelines</u> (https://docs.google.com/document/d/1hTldEfWhX21B_Vz9ZentkPeziu4pPfnwiZbwQB27E90/edit?usp=sharing) schedule a tutor session in the Tutor Sessions section of Bootcampspot Canvas
- 5. If the above resources are not applicable and you have a need, please reach out to a member of your instructional team, your Student Success Advisor, or submit a support ticket in the Student Support section of your BCS application.

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