

Datathon 2024 Participant Sheet

Hourly

Saturday November 2nd

Event	Hour	Place
Welcoming participants	9:00	Atrium
Brunch	10h	Atrium
Opening ceremony	10h30	L-1720
Workshop - Training on a financial theme	11h	L-1720
KickOff (Start of the 48 hours of the Competition)	12h	L-1720
Workshop par BNC	12h30	L-1720
Supper	17h	Atrium

Sunday November 3rd

Event	Hour	Place
Breakfast	9h	Atrium
Dinner	12h30	Atrium
Workshop on How to pitch (StoryTelling) par Synechron	14h	M-1010

Monday November 4th

Event	Hour	Place
End of the Competition	12h	Online

Friday November 8th

Event	Hour	Place
Presentation of solutions to the jury	15h	To be determined
Start of the evening networking	17h	Atrium

Challenge

Case

Create a tool using generative AI to help financial analysts perform their work.

At your disposal:

- The entire AWS environment (BedRock, Cloud9, ...)
- A [drive](#) with:
 - o Annual reports from different companies (to be used or not, depending on the team's choice);
 - o Workshops given throughout the event;
 - o A range of links to consult.
- All online data of the "Open Source" type. Participants may not use paid data sources, under penalty of disqualification.
 - o Strong recommendations: YahooFinance, MorningStar, FRED and annual drive reports.

Examples of tools that participants can develop:

Participants can draw inspiration from these ideas, but are not limited to:

- **Automatic Report Summarization:** Generate concise summaries of key information from financial reports.
- **Sentiment analysis of financial reports:** For example, identifying whether certain sections of financial reports (such as letters to shareholders or management commentary) are optimistic, pessimistic or neutral, and using this type of analysis in the form of a report or dashboard.
- **Monitoring of financial indicators over the years:** Detect major changes (sudden variations, unusual income or expenses, etc.). This helps identify unexpected deviations in the time series of financial data.
- **Financial predictions:** Anticipate future financial trends by analyzing historical data (revenues, costs, profits, etc.).
- **Extraction of financial KPIs and data visualization:** Create dashboards with custom charts and visualizations.

- **Automated multi-report comparisons** : Perform comparative analyses between different financial periods, for example.

Steps to solve the case:

1. **Onboarding**: Understanding the role of a financial analyst and how it works
general of generative AI
2. **Environment**: Get familiar with the AWS environment
3. **Construction of the tool**
4. **Prepare the presentation in front of the jury (after 48 hours)**: Video demo of your solution, Powerpoint and OnePager presentation.

Expected deliverables:

- **Your code**

- o Deadline: Monday, November 4 before noon;
- o Submission: Send a URL link to your code repository (GitHub link, etc.) to logiciel@polyfinances.ca with your team number; ____

- **Recorded video demo**

- o Deadline: Tuesday, November 5 before 11 a.m.;
- o Maximum 3 minutes ;
- o Demonstrate the features of your tool. This
demo will be presented to the jury on November 8th if you are selected as finalists;
- o You will have access to the AWS environment until Tuesday around 11am.
However, you will be disqualified if you make any changes to your tool after Monday noon;
- o Submission: Publish your video online (YouTube, Vimeo, Facebook Video, ...) and make it public. Send the URL link of your video to logiciel@polyfinances.ca with your team number; _____

- **Documentation technique**

- o Create a diagram that explains the architecture of your tool, technological choices, and use of the AWS environment.
Check out the resources for the presentation in the [drive](#) . _____
- o Submission: At the same time as the video demo.

- **Presentation (finalists only)**

- o Date: Friday, November 8, 3 p.m.;
- o Maximum 5 minutes ;

Evaluation criteria

Quality and features of the support tool (35%)

- **Usefulness and relevance** : The tool must provide practical and varied assistance for financial analysts (summaries, ideas, extraction of key information) beyond financial reports.
- **Adaptation of results** : Ability to generate syntheses, extractions and analyses tailored to various analytical tasks.
- **Innovative features** : Integration of advanced functions (automation of recurring tasks, proactive analyses, compatibility with external databases/tools).

Data analysis and processing capacity (35%)

- **Processing versatility** : Processing multiple financial sources and market (articles, databases, trends).
- **Synthesis and analysis** : Quality of the analyses and syntheses generated (e.g.: trend syntheses, portfolio evaluation).
- **Data visualization** : Generation of visuals (graphs, tables) to facilitate interpretation.
- **Innovative approaches** : Use of AI for data processing innovative (eg: prediction and automation).

User experience (UX/UI) (10%)

- **Intuitive design** : Easy navigation and intuitive design.
- **Accessibility and ergonomics** : Simplified workflow adapted to needs financial analysts.

Using AWS environment (20%)

- **AWS Services Integration** : Effective use of AWS services for the data processing and AI content generation.
- **Cloud efficiency** : Cost optimization, scalability and efficient management of AWS resources.