***You can submit your doubts here:*** [***https://forms.gle/dkN3EUJCuo9h8oPCA***](https://forms.gle/dkN3EUJCuo9h8oPCA)

**Application Features - dbPaint**

1. **Integrated Insights**: dbPaint combines news, market data, events, and proprietary information to provide a comprehensive view. It integrates both quantitative (technical signals) and qualitative (macroeconomic trends, industry developments) factors.
2. **Investment Research**: Utilizing AI, the application analyzes news and internal data to identify patterns and emerging trends, generating valuable insights for investment research.
3. **Risk Management**: Real-time analysis helps proactively manage risks related to market fluctuations, regulatory changes, and geopolitical events.
4. **Sentiment Analysis**: The app uncovers market sentiments, investor behavior, and potential inefficiencies.
5. **Hyperconnected UI**: Users access insights through a hyperconnected, function-rich interface.

### Buildathon Challenge

Participants will be divided into three groups, each focusing on one of the following subsets. Each subset is designed to be equally challenging and crucial to the overall functionality of dbPaint.

**Subsets**

1. **Market Data Risk**
   * **Region Risk**: Analyze and mitigate risks arising from market data anomalies on a global scale, ensuring data integrity and reliability
     + **Challenge Clue 1**: Implement machine learning models that can predict and classify market anomalies in real-time and create a dashboard that visualizes these anomalies and their potential impacts.
     + **Challenge Clue 2**: Develop a system that can automatically flag and explain significant deviations in market data, providing actionable insights for risk mitigation.
   * **Currency Risk**: Focus on managing risks associated with currency fluctuations. Create models to predict currency movements and develop strategies to hedge against potential losses.
     + **Challenge Clue 1**: Design a simulation tool that can test various hedging strategies under different market scenarios and provide recommendations based on historical data and predictive analytics.
     + **Challenge Clue 2**: Build an alert system that notifies users of significant currency movements and suggests immediate actions to mitigate risks.
2. **Company Subsidiary**
   * Forecast & Contingency tools to analyze how the banking product can be sold out or suggested the performance and risk profiles of company subsidiaries. Integrate data from various sources to provide a holistic view of subsidiary operations and their impact on the parent company.
     + **Challenge Clue 1**: Create a dynamic reporting system that can generate real-time performance metrics and risk assessments for each subsidiary, incorporating both financial and non-financial data.
     + **Challenge Clue 2**: Develop a predictive model that can forecast subsidiary performance based on market conditions, internal metrics, and external factors.
   * Create dashboards to visualize subsidiary performance metrics.
     + **Challenge Clue 1**: Implement interactive visualizations that allow users to drill down into specific metrics, compare subsidiaries, and identify key performance drivers and risk factors.
     + **Challenge Clue 2**: Design a benchmarking tool that compares subsidiary performance against industry standards and competitors.
3. **Financial Pulse: Monitoring Liquidity and Cash Flow through Economic Indicators** 
   * Design solutions to enhance the efficiency and effectiveness of the treasury front office. Implement tools for real-time monitoring of cash flows, liquidity management, and based on news about company or country, need to find out the legal entity involved in that. And What is their liquidity or cashflow requirement as per that topic.
     + **Challenge Clue 1**: Develop an AI-driven liquidity forecasting model that can Scarp different news sources and pinpoint the topic which user is looking at and analyze the impact of that news.
     + **Challenge Clue 2**: Create a real-time dashboard that integrates various data sources to provide a comprehensive view of treasury operations, including cash positions, investment portfolios, and market conditions.
   * Develop interfaces that provide actionable insights for treasury operations.
     + **Challenge Clue 1**: Create a user-friendly interface that integrates real-time data feeds, provides alerts for critical events, and offers scenario analysis tools for decision-making.
     + **Challenge Clue 2**: Implement a decision-support system that uses AI to recommend optimal investment and liquidity management strategies based on current and projected market conditions.

### Judging Criteria and Guidelines: Deutsche Bank Buildathon

#### Overview

To ensure a fair and engaging competition, we have established a set of judging criteria and guidelines. These will help evaluate the teams’ solutions across all subsets, ensuring that each team has an equal opportunity to showcase their skills and creativity.

### Judging Criteria

1. **Innovation and Creativity (25%)**
   * **Originality**: How unique and innovative is the solution? Does it introduce new concepts or approaches?
   * **Creativity**: How creatively has the team addressed the problem? Are there any novel features or functionalities?
2. **Technical Implementation (25%)**
   * **Functionality**: Does the solution work as intended? Are all features and functionalities implemented correctly?
   * **Technical Complexity**: How technically challenging is the solution? Does it demonstrate advanced technical skills and knowledge?
3. **User Experience (20%)**
   * **Design and Usability**: How user-friendly is the interface? Is the design intuitive and visually appealing?
   * **Accessibility**: Is the solution accessible to a wide range of users, including those with disabilities?
4. **Impact and Relevance (20%)**
   * **Practicality**: How practical and applicable is the solution in a real-world investment banking context?
   * **Value Addition**: Does the solution add significant value to the investment banking process? Does it address key challenges effectively?
5. **Presentation and Communication (10%)**
   * **Clarity**: How clearly and effectively does the team present their solution? Are the key points and features well-explained?
   * **Engagement**: How engaging and persuasive is the presentation? Does it capture the judges’ interest and attention?

### Guidelines for Teams

1. **Team Composition**
   * Teams should consist of 2-5 members (Ideally 5) with diverse skill sets, including technical, analytical, and design expertise.
2. **Project Submission**
   * Teams must submit their final projects by the specified deadline. Late submissions will not be considered.
   * Submissions should include a working prototype, a detailed project report, and a presentation deck.
3. **Presentation**
   * Each team will have 15 minutes to present their solution, followed by a 5-minute Q&A session with the judges.
   * Presentations should cover the problem statement, solution approach, key features, technical implementation, and potential impact.
4. **Use of Resources**
   * Teams are encouraged to use any available resources, including open-source libraries, APIs, and datasets. However, all external resources must be properly credited.
5. **Mentorship and Support**
   * Mentors will be available throughout the Buildathon to provide guidance and support. Teams are encouraged to seek feedback and advice from mentors.
6. **Ethical Considerations**
   * All solutions must adhere to ethical guidelines, including data privacy and security. Solutions that violate ethical standards will be disqualified.

### Judging Process

1. **Initial Screening**
   * Judges will conduct an initial screening of all submissions to ensure they meet the basic requirements and guidelines.
2. **Detailed Evaluation**
   * Each submission will be evaluated based on the judging criteria. Judges will score each criterion on a scale of 1 to 10.
3. **Final Presentation**
   * Shortlisted teams will present their solutions to the judges. The final scores will be based on both the submission and the presentation.
4. **Announcement of Winners**
   * Winners will be announced at the closing ceremony. Prizes will be awarded to the top three teams, and special recognition will be given for outstanding achievements in specific categories.

### Additional Resources for Participants

1. **Data Sets**
   * **Market Data**: Historical and real-time market data, including stock prices, currency exchange rates, and commodity prices.
   * **Economic Indicators**: Data on GDP, inflation rates, employment statistics, and other macroeconomic indicators.
   * **Company Financials**: Financial statements, earnings reports, and other relevant data for various companies.
2. **APIs and Tools**
   * **Financial APIs**: Access to APIs that provide financial data, such as Alpha Vantage, Quandl, and Yahoo Finance.
   * **Machine Learning Libraries**: Libraries like TensorFlow, PyTorch, and Scikit-learn for building and training machine learning models.
   * **Data Visualization Tools**: Tools like Tableau, Power BI, and D3.js for creating interactive visualizations.
3. **Technical Documentation and Tutorials**
   * **API Documentation**: Detailed documentation for any APIs provided, including usage examples and best practices.
   * **Tutorials**: Tutorials on relevant topics such as machine learning, data analysis, and financial modeling.
4. **Mentorship and Support**
   * **Mentors**: Access to mentors with expertise in finance, technology, and data science. Mentors can provide guidance, answer questions, and offer feedback.
   * **Office Hours**: Scheduled office hours where participants can get one-on-one support from mentors.
5. **Workshops and Webinars**
   * **Technical Workshops**: Sessions on using specific tools and technologies, such as machine learning frameworks or data visualization tools.
   * **Industry Insights**: Webinars on current trends and challenges in investment banking and financial technology.
6. **Collaboration Tools**
   * **Communication Platforms**: Access to platforms like Slack or Microsoft Teams for team communication and collaboration.
   * **Project Management Tools**: Tools like Trello or Asana to help teams manage their projects and stay organized.
7. **Sample Projects and Case Studies**
   * **Sample Projects**: Examples of similar projects to provide inspiration and guidance.
   * **Case Studies**: Real-world case studies that illustrate how similar challenges have been addressed in the industry.