DeloitteStiftung

Initiative D21

DIGITAL FUTURE CHALLENGE

DFC #6 – Submission Template (EN)

mit Unterstützung durch

Giesecke+Devrient Stiftung

BertelsmannStiftung

DIGITAL FUTURE CHALLENGE #6

Elevator Pitch for Commerzbank: InvestQuest, An Economic Playground

InvestQuest turns financial fear into confidence. Guided by an AI financial tutor, teens aged 13–17 invest virtual capital in real markets, learning resilience, diversification, and long-term discipline. With personalized feedback, they build responsible habits and at 18 seamlessly transition into Commerzbank to begin real wealth creation.

End-to-end, multi-year pathway (ages 13–18) powered by F.I.N.N.—an adaptive AI mentor using real market data and virtual capital to instill resilient, responsible investing habits before a seamless transition into real-world Commerzbank banking.

From the idea to the big picture – your vision as a convincing visualization

Our vision is to redefine financial education, not as a theoretical exercise, but as a practical, continuous life skill embedded in real-world experience. We aim to cultivate a generation of young adults who are not only financially literate, but also able to make smart decisions in a dynamic economy. We begin with F.I.N.N. (Financial Intelligence Neural Network), our proprietary AI mentor that guides teenagers (ages 13–18) through multi-year financial journeys. Unlike traditional simulations, F.I.N.N. connects students directly to the real financial markets, using virtual capital which they are encouraged to invest. This immersive environment allows them to manage portfolios, respond to actual economic events, and learn through applied decision-making, all without the risk of real financial loss. To enhance engagement, the experience is deeply gamified: users compete in challenges with friends, strive for a high position on the global ranking, and are motivated by achieving badges and rewards. F.I.N.N. offers personalized coaching, intervening with gentle guidance during poor decisions and reinforcing strong ones with encouragement and insight. This AI tutor adapts the system based on the age and gender of the user to ensure maximum relevance. This is not just an educational product, it's a seamless ecosystem built in partnership with Commerzbank. During the Preparation phase (ages 13–18), students engage with real market data and develop fluency in budgeting, saving, credit fundamentals, and investment principles. The system gets more mature the older the customer gets, scaling the complexity of scenarios and the tone of coaching to provide a truly individual learning experience. They build a financial track record based on real decisions, made with virtual capital.

At age 18, the Transition begins. Students are invited to open their first real Commerzbank accounts, with their virtual financial history serving as a benchmark for responsible real-world spending. Our solution creates measurable impact: we expect a significant reduction in common financial pitfalls (such as overdrafts and high-interest debt) among our program graduates compared to the general population. Our goal is for every young person to graduate high school with the confidence and skills to navigate modern financial life.

The challenges – and what makes our solution unique

Challenge

- The primary challenge is the inherent conflict of interest and the potential for algorithmic bias within a system designed both to educate and to seamlessly onboard customers to a specific commercial partner (Commerzbank).
- CNBC conducted a survey to understand how young adults manage their finances and why many avoid investing. The results show that a significant portion aren't investing: 24% keep their money in cash, and 42% aren't saving or investing at all. Many are falling into typical financial pitfalls like not saving, taking on harmful debt, and lacking long-term planning.
- How to make financial education appealing to young people (13-18)?

Our solution

- The solution uses two AI agents: a Personal AI that exclusively defends the user's interests. The user interacts with the Personal AI, which evaluates, filters, or blocks biased recommendations, ensuring transparent, unbiased, and trustworthy financial guidance despite inherent conflicts of interest.
- FINN, the trusted AI financial tutor guiding teens to real-world investing confidence.
- To engage young people (13-18), make finance a competitive game: allow virtual investing, social challenges, and global rankings tied to badges and real-world rewards.

How our solution works – and next steps

How our solution works...

InvestQuest is a multi-year financial learning ecosystem for users aged 13–18 that prepares them for real investing and real-world financial decisions. While no real money is used, each user receives virtual capital that they invest directly into the actual financial markets, ensuring the experience is authentic without exposing them to real financial risk. Rather than focusing on quick wins, InvestQuest develops long-term financial habits such as steady contributions, diversification, budgeting discipline, and informed decision-making during market volatility. Users navigate real economic events in real time—bull markets, recessions, policy shifts, and recoveries—building emotional resilience and responsible investing behavior through applied practice. At the core of the platform is F.I.N.N. (Financial Intelligence Neural Network), a proprietary AI mentor that accompanies students throughout their financial journey. F.I.N.N. analyzes each user's decisions, behavior patterns, learning style, age, and gender to deliver personalized coaching. It intervenes gently during misguided choices, reinforces strong decisions, and continually adapts the difficulty and tone of the learning path as the user matures. To keep students engaged over multiple years, InvestQuest is deeply gamified: users compete with friends, climb global rankings, and earn badges and rewards for consistent, responsible behavior. As they grow older, the system introduces increasingly sophisticated real-world concepts such as regulation, taxation, and the broader Commerzbank investment ecosystem. At age 18, InvestQuest initiates a seamless Transition phase. Students are invited to open their first real Commerzbank accounts, with their multi-year virtual financial track record serving as a baseline for responsible real-world spending and investing.

In essence, InvestQuest is not a simulation, but a real-market-connected, AI-guided learning environment that transforms teenagers into confident, informed, and financially capable young adults before they ever invest real money.

Concrete steps for implementation are...

Workout the details for the UI design

Define the ways how present F.I.N.N should be in the application

Implementation of the system for various operating systems

Challenges of our solution are...

Appealing UI for customers between the age of 13 and 18
F.I.N.N. should teach the customer and not bias its decisions
Legal requirements can turn out to be problematic
Trustworthy for adults

Resources needed are...

Server

Advertisement

Experts in Investment and Teaching

Extra page: Our Personal AI Tutor: F.I.N.N (Financial Intelligence Neural Network)

InvestQuest is built around F.I.N.N., an adaptive educational AI designed to accompany young users throughout their financial learning journey—from their very first virtual investment to their eventual entry into real markets as adults. F.I.N.N. is not an investment advisor and does not provide real financial recommendations. Instead, its purpose is to teach, explain, and cultivate responsible financial behavior through guided exploration, and reflection.

To achieve this safely and effectively, InvestQuest relies on an integrated AI agent that combines personalized learning support with secure, compliant access to financial knowledge. This agent represents F.I.N.N. and is the only system users interact with. It focuses on understanding each learner as an individual—screening their learning style, identifying financial interests, recognizing knowledge gaps, and tracking development over time. As users progress, F.I.N.N. continuously adapts lessons to their pace and maturity, ensuring explanations remain age-appropriate, accessible, and engaging.

Within its internal processes, F.I.N.N. also handles all tasks related to gathering and interpreting financial information. When it requires specific facts, market examples, or regulatory context to build a realistic educational scenario, the same agent securely accesses approved financial data, institutional research, and compliance frameworks. This internal capability enables F.I.N.N. to generate accurate, up-to-date, and regulation-aligned insights without exposing users to real financial advice.

After retrieving this information, F.I.N.N. interprets and transforms it through the lens of the user's needs and maturity level. Institutional insights are filtered and reshaped into pedagogically meaningful content—simulated investment scenarios, explanatory models, interactive challenges, or reflective prompts. This ensures that each learning moment remains both safe and deeply informative.

Through this design, InvestQuest provides a highly personalized, secure, and educationally rich environment that builds financial confidence in young users long before they enter the real investment world.

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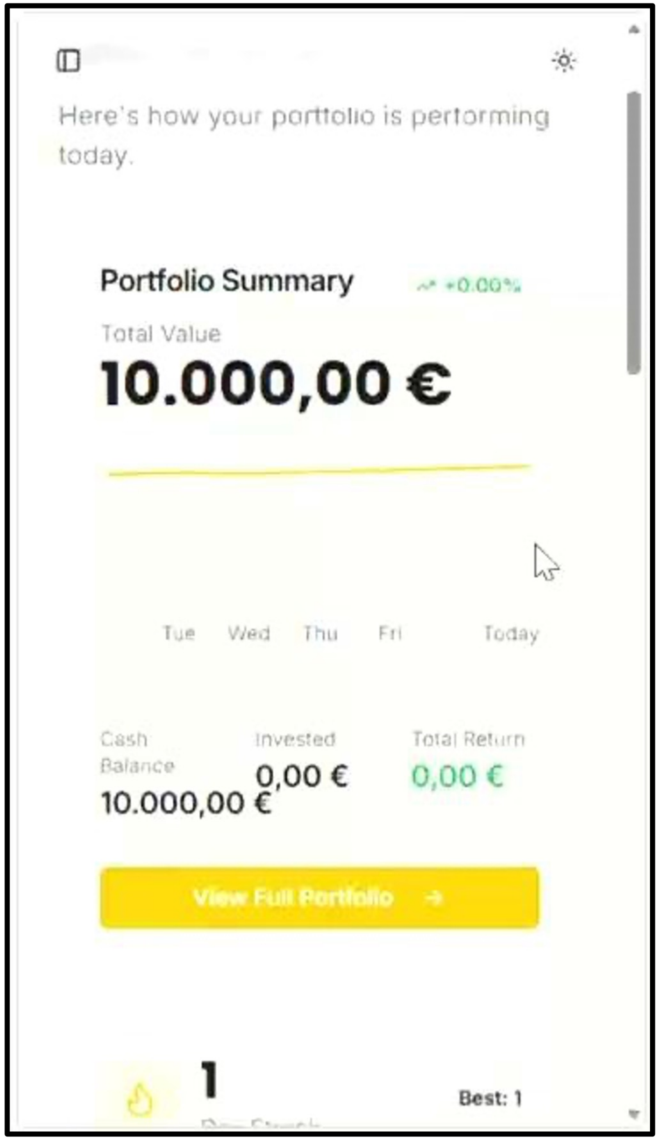
Extra page: Our Prototype

Our prototype is an educational app designed for young people aged 13–18 that introduces them to the banking and financial world in a practical and engaging way. Users manage a virtual portfolio, track performance and daily changes, and gain hands-on experience with real market data.

The app is structured around three core areas: interactive lessons on banking, saving, investing, budgeting, and risk management; simulated trading with virtual money in real companies; and gamified challenges with leaderboards, badges, and rewards that encourage consistent participation.

Throughout the experience, an adaptive AI tutor, F.I.N.N., personalizes content, guidance, and difficulty based on each user's progress. The clean, intuitive interface is built as a Commerzbank-powered ecosystem that gradually prepares users for real-world financial decision-making.



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Bibliography

CNBC. (2024, August 20). *Young people should aim to avoid these 3 common money mistakes, say financial experts*. CNBC. http://cnbc.com/2024/08/20/young-people-should-aim-to-avoid-these-money-mistakes.html

Bair, S. (2025, April 11). *Op-ed: Regulated finance needs to build trust with Gen Z*. CNBC. https://www.cnbc.com/2025/04/11/op-ed-regulated-finance-needs-to-build-trust-with-gen-z.html

Reuters. (2025, November 14). *Over-indebtessness on the rise again in Germany, survey shows*. Reuters. https://www.reuters.com/business/finance/over-indebtessness-rise-again-germany-survey-shows-2025-11-14/