

OCTOBER 22-25, 2017
Money USA
20/20

**HACKATHON
CHALLENGES
& PRIZES**



In March 2016, Capital One launched the first True Open Banking Platform in U.S. called DevExchange.

[DevExchange](#) gives developers what they are looking for: easy-to-integrate APIs, a robust testing environment, great documentation that is comprehensive and simple, and sample code and reference applications.

We know that external developers, startups, and other innovators are the co-creators of next generation, digital experiences. We challenge you to find the most creative use of our [APIs](#). Out-innovate the other teams and we'll send you on a VIP trip of a lifetime.

Challenge

[BANK ACCOUNT STARTER API](#)

This API gives our partners a way to provide their customers a new method of opening a Capital One MMA, Savings, or CD account, directly from their own ecosystem/ user experience/ app.

Tell us how you can use the Bank Account Starter API to make people's lives better.

Examples:

Integrate with a moving company or the USPS address forwarding service. Customers can then change banks at the same time they are moving and changing their address.

Integrate with child's savings services or state college funds, so you can start saving as soon as you have a new addition to your family.

Integrate with payroll services or new hire programs to make it easier for direct deposit to be enabled quickly.

[IDENTITY APIs](#)

What would digital and peer-to-peer commerce look like if businesses and consumers could easily verify identities to quickly build trust with one another? At Capital One, we know that trust is critical to economic success - greater levels of trust reduce friction between businesses & consumers to help accelerate business activity. That's why we're giving you access to three of our APIs: Verify with Capital One, Sign Up with Capital One and Sign In with Capital One.

Examples:

Trusted buyer/seller: Whether it's Craigslist or Airbnb, buyers and sellers need to establish trust before they transact. Use Capital One's APIs to enable a buyer and seller to trust each other without having to reveal sensitive information about themselves to each other.

Enhanced accounts: Twitter uses badges to signify accounts whose owners have been verified. This feature also helps the account owner work with Twitter to recover the account should the owner lose access to it. Use our APIs to increase the trust in your relationship with your customer.

Better sign-in: Capital One offers a sign-in API much like Facebook Connect, but Capital One's users are fully verified. Create a sign-in experience that highlights the advantages of Sign-in with Capital One.

[CREDIT OFFERS API](#)

The Credit Offers API provides tools that you can use to offer Capital One credit products to your customers. How can you use this API to offer relevant low-touch experiences for people looking for credit to make purchases while also giving them more confidence in their ability to access credit?

Examples:

Integrate the Credit Offers API via channels that currently aren't available to people today looking to apply for a credit card but are unsure about their credit worthiness (e.g., SMS etc.).

Integrate the Credit Offers API with other APIs both internal and external to Capital One to create a more holistic and relevant experience for prospective credit card applicants.

REWARDS API

We know that rewards is one of the most important reasons people choose a credit card and we believe that we can gain customers' attention and engagement by integrating with their favorite activities, experiences and merchants they are already frequently interacting with. How can you integrate the Rewards API differently to increase customers' awareness and encourage them to use and engage with their rewards more?

Examples:

Ordering coffee on the Starbucks app, users can see how many coffees they can get with current rewards points.

Reminders are sent to users to use rewards to cover the cost of a purchase just made on Amazon.

Prize

Receive a VIP four-day prize package trip for up to six (6) members of the winning team to go to the 2018 SXSW event! Rub elbows with tech leaders, catch some killer music and cruise the interactive sessions. Each day, you'll find tech talks, demos, happy hours, and a few surprises. Then come back at night for great music performances.

- Four-night accommodations at pre-selected hotel
- Airfare (2-way trip)
- 3-day tickets to SXSW – Interactive passes / badges
- All access day-time events at Capital One House at Antone's
- 1 pass each to an evening ticket (music) at Capital One House at Antone's
- Money20/20 Hackathon winners announced at SXSW 2018



Clover, a First Data Company, is a cloud-based point-of-sale platform designed to serve the needs of a variety of businesses – from large stadium arenas to local coffee shops. The platform is comprised of a family of hardware and software solutions, an app market that has hundreds of developers coding to it, and is built on top of a modern, flexible operating system.

With its Android SDK and Web REST API, the Clover platform allows developers to create integrations that empower merchant success. Merchants all over the US, UK and Ireland use Clover not just for payment acceptance but to manage their businesses, including providing loyalty programs to customers, managing employees and inventory, providing additional ordering capabilities and much more. We want you, the developers, to provide creative solutions for our merchants.

Before you begin creating a solution for our merchants, learn more about them: <https://docs.clover.com/build/meet-our-merchants-2/>

Challenge

Solutions for full and quick service restaurants

Clover has a huge presence in these industries. Create a solution that helps restaurant owners be successful.

For example, your solution could help restaurant owners:

- Reduce waste
- Improve service times
- Track customer satisfaction
- Incorporate employee gamification

Clover + IoT

There are many unexplored ways that connected devices can interact with Clover.

Create a solution that uses this technology to help merchants run their businesses efficiently.

- Voice Assistant - Google Assistant, Alexa, Siri, Cortana
- Beacons
- Smart lights

Prize

Win up to \$13,624 in prizes from Clover! Each member of the winning team will receive:

- \$1,500 Gyft card towards travel expenses for an exclusive visit to Clover HQ in Sunnyvale, CA
 - Spend time with the Clover engineers to learn how to turn your hack into a real product
 - Be featured in the Clover developer blog and YouTube channel
 - Networking opportunities with the founders of Clover
 - Exclusive Clover swag
 - Catered lunch with the Clover team
 - Additional \$1,000 Gyft card, awarded upon completion of visit to Clover HQ
- Vilros Raspberry Pi 3 RetroPie Arcade Gaming Kit with 2 Classic USB Gamepads (\$89.99 value)
- UE BOOM 2 Phantom Wireless Mobile Bluetooth Speaker (\$135.00 value)
- Signed NASCAR swag: First Data and Clover are currently sponsoring NASCAR driver Kyle Larson for two races this fall. This prize will feature NASCAR gear that has been personally signed by Kyle. – Priceless!





LEVERAGE THE LATEST BLOCKCHAIN INNOVATION

Mastercard Blockchain is our new, advanced approach to Blockchain technology. By providing a permissioned platform to our network of developers and partners, our Blockchain platform delivers:

- **PRIVACY** The platform prioritizes the privacy of all participants on a Blockchain. Only direct partners will have insight into their specific transactions.
- **EASE OF USE** Allows integration of the benefits of Blockchain into applications without the overhead of setting up a local node.
- **FLEXIBILITY** Provide samples to get you started quickly, and provide a framework to help you design your application protocol.
- **SCALABILITY** The consensus mechanism brings commercial processing speed and extensibility to the Blockchain.
- **A TRUSTED PARTNER** With Mastercard's existing capabilities at your disposal, you can build real world financial applications that are ready for global scale.

EXAMPLES OF HOW TO USE THE MASTERCARD BLOCKCHAIN

PROOF OF PROVENANCE: The cost of fraudulent goods is worth \$1.4 trillion globally. Leverage the Mastercard Blockchain and Authorization Network to easily track high value pharmaceuticals, art, luxury goods as they are created, transferred, purchased and re-sold. For example, use a Mastercard plastic card with a standard payment terminal to record that the asset arrived at a location on the Blockchain.

VEHICLE SERVICE HISTORY: Using the privacy feature of the Mastercard Blockchain, enable vehicle owners and authorized dealers to share vehicle information with each other privately in order to facilitate the payment. For example, an owner gets their car serviced, the garage writes details about the service (odometer reading, service type) to the Blockchain. With the Mastercard Blockchain, only the participating parties can see these details. When ownership is transferred to a new party, they can now see the entire service history.

P2P: The Person-to-Person global market opportunity is \$16 trillion. Take advantage of the Mastercard Settlement Network to transfer funds between banks. For example, when two parties agree to transfer funds they write a settlement request to the Blockchain. The Mastercard Settlement Network reads the Blockchain and will transfer the funds between two banks. It then writes a confirmation of transfer to the Mastercard Blockchain.

Challenge

Using the robust features of the Mastercard Blockchain, we invite you to develop a solution for one of the following categories:

SMART CITIES

The world is becoming more urban – within the next generation, the number of people living in cities is expected to jump from 54 percent to close to 70 percent. Many cities struggle to cope with this growth and face the challenge to provide their citizens with access to essential things such as housing, employment, transportation and banking. Use the Mastercard Blockchain for connected devices, the transit system, parking, smart homes, offices and retail environments to name but a few.

FINANCIAL INCLUSION

There is an urgent need to connect the two billion unbanked adults to basic financial tools and services. Use the Mastercard Blockchain to bring this population into the formal economy by transferring funds/assets, crowdsourcing money, get access to credit and beyond with the highest level of security available.

HUMANITARIAN AID

Unfortunately, natural and man-made disasters and crises are all too common. Use the Mastercard Blockchain to get the necessary aid to the people that need it the most – quickly, transparently, and with minimum waste – all while protecting the dignity and privacy of the recipients.



ROLL YOUR OWN

Blockchain is a technology which enables a wide variety of use cases – use your imagination, get creative, and come up with new compelling experiences that you think the Blockchain uniquely unlocks!

LEARN MORE

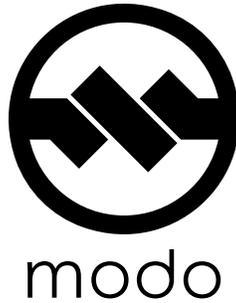
Connect with one of our onsite engineers on the integration of the Mastercard Blockchain APIs into your solution. We look forward to working with you!

*Additional Terms for participation may apply.

Prize

Winners of the Mastercard Challenge will receive:

- HTC Vive Virtual Reality Systems (1 system for each of the winning team members)
- \$2,000 Mastercard Prepaid Cards (1 prepaid card for each of the winning team members)
- Priceless VIP Experience in New York City (3 Day Experience) (For up to 5 members of the winning team)*
 - Airfare and Transportation
 - Luxury Hotel Accommodations
 - Welcome Dinner Reception at Celebrity Chef Restaurant
 - Tickets to a Broadway Show
 - Private Tour of New York City
 - Personalized Tour of Mastercard's New York City Tech Hub
 - Farewell Dinner Reception



Howdy once again from the ModoNauts. You've been hacking on our challenges at the Money20/20 Hackathon since #Day1 when we were a little baby startup. But we've grown up the past 4 years, and this time we're doing things a little bit differently.

We have so much going on back at Modo HQ that we cut back on the number of devs we brought along this year and need YOU to pick up our slack. Your challenge is to help us out with our company challenges by working alongside the Modo team to build demos that we need done. These are real life projects that our team is really working on - fo realz. We will give you the requirements to build, and you'll have all the help you could need from our team. AND if your code jams, we're buying it. No fooling around.

Challenge

Move money in & move money out of different digital networks

- Ex. Move money from a Alipay account into a bank account in order to help people vacation through China
- Ex. Have delivery truck driver in India accept PayPal payment for goods delivered from a merchant in a small market

Imagine an amazing demo using receipts after the purchase

- Ex. Enable receipts to include and track calorie counts from restaurant purchases
- Ex. Allow receipts to be found through banking app statements

Combine multiple sources of value and deliver through single or multiple sources

- Ex. Pull value from different asset sources (gift card, loyalty points, prepaid card, cash) so friends can pay for a birthday party trip to Vegas

Checkout at the store using loyalty points

- Ex. Pay for your sandwich and a stick of gum using your loyalty points at the in-store points of sale

Do your own thing! What is another use of our platform that will wow our prospects and clients?

- Ex. Move money using the other companies in the room to create an experience that isn't available today (we don't compete with them - we're all friends)

Prize

Since you're helping us out this year, we want to help out some people who are really in need. If you submit your code for our challenge, we're going to donate \$1,000.00 from your team to the Hurricane Harvey & Irma relief efforts in Houston, Texas (a short drive south of our Dallas HQ) and Florida.

The winners of our challenge will receive:

An additional donation of \$2,500 per team for the victims of Hurricane Harvey & Irma

OR

A 4-night team volunteer trip to a location of your choice. We'll cover flights, lodging, and meals and send along a couple ModoNauts as well.

AND

An invite to the Payments Illuminati Dinner which is the most exclusive dinner this side of the Mississippi full of payments industry top-dogs on Sunday night after the Hackathon.

PLUS

If your code is singing our Modo song, and we think it can be used as a real life demo to show off, we will buy it. Cross our hearts.



Challenge

At Synchrony Financial we use data every day to pioneer the future of financing for our retail partners and customers. As we help them realize their ambitions, we want you to engage with us so we can continue to implement our AI capabilities in new and amazing ways.

Your challenge: Use our APIs to build an experience that surprises and delights. For example, how could you enhance the retail shopping experience if you knew a shopper's most likely next purchase? Or improve how a financial decision is made based on a person's spending behavior analysis?

Now's your chance to use your coding skills and our data insights to build the future of financing — and win some great prizes.

Prize

We believe everyone has a unique perspective. Whether you're on a Pitch Team, Runner-up Team or Winning Team, you all provide the impetus and inspiration to build incredible applications.

These prizes will fuel your drive to compete — and may even help you achieve your ambitions!

Pitch Teams (each member receives):

- \$50 Gift Card to one of our retail partners

Runner-up Team (each member receives):

- HTC Vive
- \$500 Gift Card to one of our retail partners

Winning Team (each member receives):

- HTC Vive
- Apple iPad Pro (256GB) or Microsoft Surface Pro (i5 128GB)
- \$1,000 Gift Card to one of our retail partners



Challenge

Re-imagine the cardholder experience in a smart city of tomorrow that is totally cashless. How will the customer experience in payments evolve in this setting? Specifically, consider at least one of the following areas:

- Retail Point of Sale
- Identity Verification
- Urban Mobility
- Local Offers
- Loyalty & Rewards

Using Visa APIs along with third party APIs, build a solution or solutions that could help issuers and/or merchants provide seamless payment experiences through connected devices, mobile applications or other emerging cutting-edge technologies (e.g., VR or AI).

Visa event team support staff will be on hand to help bring your idea to life.

Prize

One winning team (up to 5 people total on team) will receive:

- \$20,000 USD awarded as five \$4,000 Visa Prepaid cards
- Up to 5 new Fitbit payment-enabled wearable devices (1 Fitbit per team member), valued at approximately \$300 each
- Up to 5 new Xbox One Consoles (1 Xbox One Console per team member), valued at approximately \$500 each
- Up to 5 new iPhone X Devices (1 iPhone X per team member), valued at approximately \$1,000 each
- An invite to Visa's exclusive, private party at Encore Beach Club in Las Vegas on the evening of Monday, October 23, 2017
- Publicity through Visa's digital communication channels

Get all the tools you need to prepare for the hackathon before the event. Join our API webinars and be part of the Visa Developer Squad. [More details here.](#)



Challenge

Develop an innovative application or solution that enhances either a consumer's purchasing experience (instore or online) OR provides benefit to small or medium size business owner.

The tools could range from a unique consumer facing application, to a business strategic solution that merchants could utilize to improve their business practices that drive sales and customer satisfaction. You may utilize any advanced hardware your team has available (such as beacons or wearables), and any Worldpay API feature including Vault, Recurring Billing, as well as 50 user defined fields that could be leveraged for data analytics or business insights.

Prize

The Winning Team will win \$15,000 in cash, to be split between all team members.