PayJunction Vision Statement

Team:

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Company Name: PayJunction
Team Name: Grand Potato
App Name: Text2Pay

Project Description:

The goal of our project is to create a secure and efficient application that allows consumers and merchants to complete transactions through the consumer's phone, via SMS, email, or QR code, rather than using a credit card terminal. The product will send the consumer a text with the transaction summary sent through the app from business to consumer for the consumer to pay within 24 hours. The highest-level expectation is to make payments easier for the consumer, faster and cheaper for the merchant, and more secure to reduce fraud.

Problem:

With credit and debit cards being one of the main ways to make payments, payment card terminals are used millions of times a day. Although payment card processing terminals are everywhere, the current ones being utilized are often old and outdated. These machines are slow and frequently errors occur forcing you to swipe or insert your card multiple times before a transaction is made.

Competing Technologies:

- Apple Pay revolutionized the convenience of business-consumer transactions through phones. While the emergence of other payment apps, such as Samsung Pay and Google Pay, have made nearly all phones compatible with mobile payments, not all point of sale systems support near-field communication (NFC). These apps use NFC to attempt to replicate the use of a credit/debit card. However, a better solution would be to just completely eliminate the use of credit card terminals. With our Text-to-Pay application, we could do this and make it so payments could be made completely through two mobile phones, making transactions fast as well as more efficient for both businesses and consumers.

- Another similar application is Venmo. With its easy friend to friend money transfers, this application quickly rose in popularity. However, it is the friend to friend transfers that limit its ability to target larger businesses and merchants. With that said, the main difference between Venmo and our PayJunction app is with the way transactions and accounts are verified. With Venmo, each payment/transaction is verified separately meaning that large payments would be flagged for suspicious activity. This would clearly be an issue for businesses or merchants as they'll constantly be receiving and sending out large sums of money on a daily basis. With PayJunction's API however, accounts would be verified before any transactions are made so that after it's verified, all payments would be sent and received smoothly and without any problems.

Project Outcome:

The project provides businesses with a solution that enables them to receive payments through customers' phones. This eliminates the problem of using outdated payment card processing terminals as well as creating a more efficient process for business-to-customer transactions.

Phases:
- SMS → HTML
- SMS or Email → HTML
- Tips and Custom Amounts
- SMS or Email → App (via App Link)
- QR Code → App

Timeline:

Sprint 1
- Set up Docker
- Set up database backend with Firebase
- Mockup UI for the consumer side app
- Mockup UI for merchant/business side app
- Make basic prototype of UI using React Native
- Create list of PayJunction APIs needed and test each
- Create PRD v1 draft

Sprint 2
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Sprint 3
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Sprint 4

Stretch Goals:
- Automated payments done at the end of each day

- Daily purchase summaries that can easily be approved by user
- Payment plan request feature to plan when future payments would be made
- Create groups for people, so that making payments and request to people in certain groups become more convenient

Tools: React/React Native, PayJunction, Firebase
Web App: PJ RESTful API,
Mobile App: Android/iOS
Agile Development Tools: Trello
Version Control Tools: Github
Communication: Slack