



MODY
UNIVERSITY
OF SCIENCE AND TECHNOLOGY

LAKSHMANGARH * RAJASTHAN

A Leading Women's University

MINOR PROJECT

Fintech Solution (DocPay)

SUBMITTED TO: Mr. Vinay Verma (Consent code- CSE-F22-007)

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01 INTRODUCTION

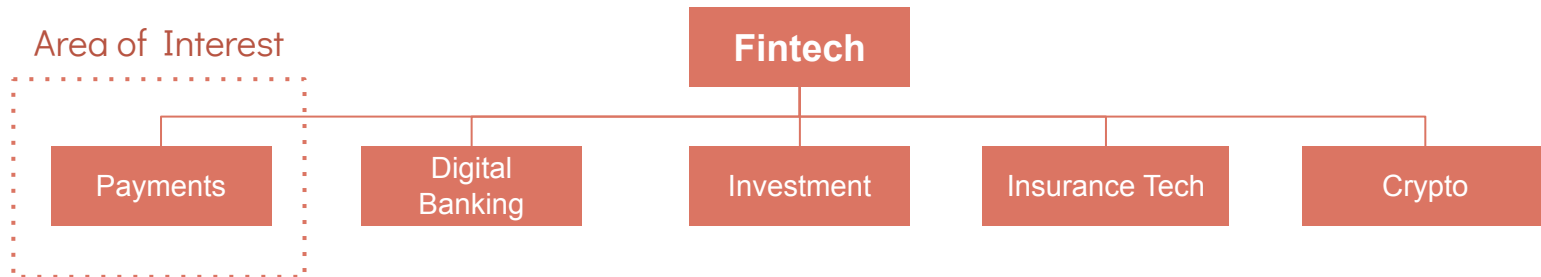
Broadly, the term "**financial technology**" can apply to any innovation in how people transact business, from the invention of digital money to double-entry bookkeeping.

- **DocPay** is integral part of the future project which aims to solve overall services of Healthcare System with technology.
- Looking in-depth as the name suggests **DocPay** idea is to focus more on the payment mechanism followed by Doctors and Healthcare service providers as we have seen there is a recent increase in online medical services which leads to arrival new problems in fintech space.
- The relationship between a healthcare consumer and their healthcare financing should not—and does not—have to be so fraught.
- As health services becoming digital, more opportunities open up for healthcare fintech solution.



WHAT IS FINTECH

- Fintech is a term used to describe financial technology, an industry consisting any kind of technology in financial services - from businesses to consumers. Fintech describes providing financial services through software or other technology and includes anything from mobile payment apps to cryptocurrency.
- Broadly, fintech describes solutions using the internet, mobile devices, software technology, or cloud services to perform or connect with financial services. Many fintech products are designed to connect consumers' finances with technology for ease of use, although the term is also applied to business-to-business (B2B) technologies as well.
- Fintech connects with the back-end systems of banks or other financial institutions. In 2020, it is possible to manage funds, trade stocks, pay for goods and services, or manage insurance through this technology (and often on your smartphone).



PAYMENT GATEWAYS

- A payment gateway is a merchant service or platform that provides any online retailer — eCommerce, SaaS businesses, online aggregators, and more — that authorizes payments via variety of options like **cards (debit and credit), digital wallets, UPI and more.**
- Traditionally payment gateways in India were provided by banks in the early 90s. But, since the late 90s, private 3rd party corporations have entered the market. Today, most organizations rely on these third-party providers to collect payments from their customers and disperse payments to vendors and employees.



DOCPAY: Payment gateway for healthcare provider

DocPay is a modern healthcare financial technology platform specifically tailored for the needs of healthcare independent practices, groups and their patients



For Providers

A simpler way to send and manage bills (digitally), and an easier bill for your patients to understand. Less confusing bills get paid faster and aren't a strain on your bottom line.



For Billers

Total control - collect patient balances 24/7 with real-time reporting and management of bill activity. See your outstanding A/R decrease before your day's done, every day.



For Patients

An incredibly easy-to-read medical bill. One where you can actually understand what's due. And the most painless way to pay it off. Or apply for payment plans that you can afford.

Technology to be used:

Integrating all the trending payment APIs to ease the payment journey for the patients

UPI is a payment system that allows you to transfer money between any two parties.



VISION AND MISSION



Communicate

DocPay will help the healthcare service providers to handle patient financial communications with ease. **DocPay** delivers intelligently timed gentle reminders to help the patients engage on their channel of choice.



Collect

Complete suite of payment options to meet the patients where they are: pay in office or pay anywhere, with payment mode of their choice. **DocPay** accepts it all, even when patients are on-the-go.



Handle Disputes

An integrated and reliable way to track and respond to billing disputes - without leaving the **DocPay** platform.



Pay Over Time

In these challenging times of Covid 19, patients need payment flexibility. **DocPay** helps the patients get care without putting your practice at risk for offline payment.

PROJECT PLAN

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Learning UPIs documentaion Guidelines								
Creating a cetralised backend enabled webapplication								
enabling login and register for users								
Third party login integration								
Integrating UPI and third party API on web application								
Testing the payment gateway								
Creating wireframes for userexperince and UserInterface								
Testing and Solving Bugs								
Onboarding users (Doctors and Healthcare Services)								

Legend:



Project Phase 1



Phase 2



Phase 3

FUTURE IMPLEMENTATION

DocPay is one of the part of the B.Tech final year Major Project, consisting all the following features:

- **HMS(Healthcare Management System)** In down the line I'll be incorporating general healthcare services like booking appointment, paying fees of Doctors, paying for health reports that are prescribed by Doctors, paying for medicines bills etc on a single app (**DocPay**).
- **Payment Service Integration:** Generating DocPay own APIs and allowing healthcare developers to code their own payment gateways.
- **Tracking Patients Healthcare Records:** Doctor will be able to track the Patients Health Records (Bills, prescription & Health reports) on a single platform.

THANK YOU

Fintech Solution- DocPay

PROJECT DESCRIPTION

Broadly, the term "**financial technology**" can apply to any innovation in how people transact business, from the invention of digital money to double-entry bookkeeping. Since the internet revolution and the mobile internet/smartphone revolution, however, financial technology has grown explosively, and fintech, which originally referred to computer technology applied to the back office of banks or trading firms, now describes a broad variety of technological interventions into personal and commercial finance.

Looking in-depth as the name suggests **DocPay** idea is to focus more on the payment mechanism followed by Doctors and Healthcare service providers as we have seen there is a recent increase in online medical services which leads to this problem.

The relationship between a healthcare consumer and their healthcare financing should not—and does not—have to be so fraught. As health services becoming increasingly digital, more opportunities open up for companies to stage data-driven interventions that can modernize and hopefully revitalize our fragmented healthcare networks.

Fintech is a term used to describe financial technology, an industry encompassing any kind of technology in financial services - from businesses to consumers. Fintech describes providing financial services through software or other technology and includes anything from mobile payment apps to cryptocurrency.

Broadly, fintech describes solutions using the internet, mobile devices, software technology, or cloud services to perform or connect with financial services. Many fintech products are designed to connect consumers' finances with technology for ease of use, although the term is also applied to business-to-business (B2B) technologies as well.

fintech connects with the back-end systems of banks or other financial institutions - but has since grown to encompass a plethora of other applications that are more consumer-focused. In 2020, it is possible to manage funds, trade stocks, pay for goods and services, or manage insurance through this technology (and often on your smartphone).

A payment gateway keeps the payments ecosystem rolling smoothly, as it enables online payments for consumers and businesses. I.e. for an online merchant, he doesn't need to be a payment gateway expert, but it's worth understanding the basics of how an online payment flows from your customer to your bank account.

DocPay will help healthcare service providers to handle patient financial communications with ease. DocPay delivers intelligently timed gentle reminders to help the patients engage on their channel of choice. A complete suite of payment options to meet the patients where they are: pay in office or pay anywhere, with payment mode of their choice. DocPay accepts it all, even when patients are on-the-go. An integrated and reliable way to track and respond to billing disputes - without leaving the DocPay platform. In these challenging times of Covid 19, patients need payment flexibility. DocPay helps the patients get care without putting your practice at risk for offline payment.

Web Application

Consisting of the user (patients and healthcare service providers) login portal

APIs

Payment APIs (NPCs UPI: Paytm, Google Pay, PhonePay) Integration

Login Auth APIs (Google, Facebook, Twitter, Truecaller) to get the user authentication done easily

Send Grid Email APIs to keep users updated with the transactions

Languages to be used:

PHP for backend and PHP composer for API integration (POST/GET), NodeJs for sending grid API, React, HTML, CSS for front-end, SQL for database management.

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