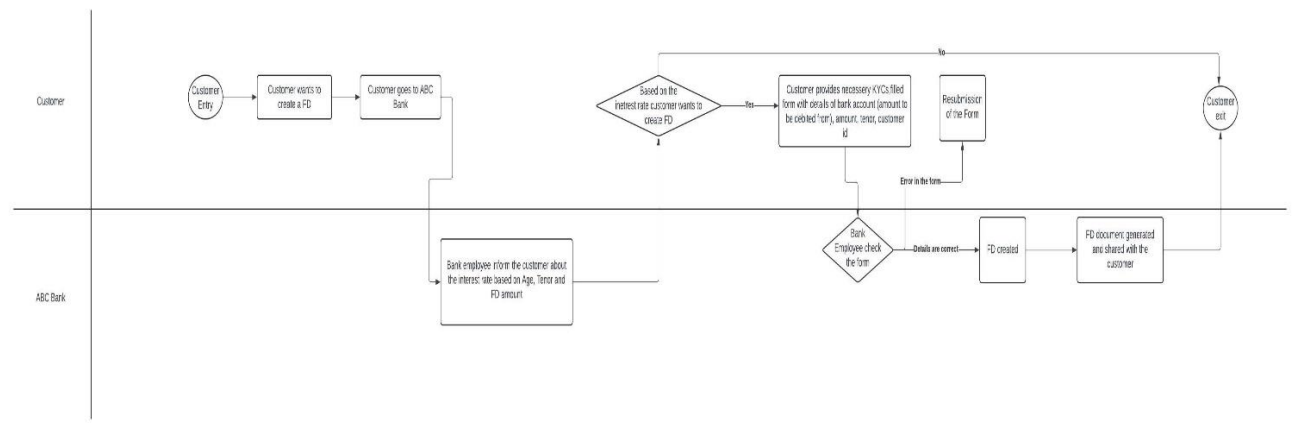# Business Analyst Capstone Project – E-Fixed Deposits:

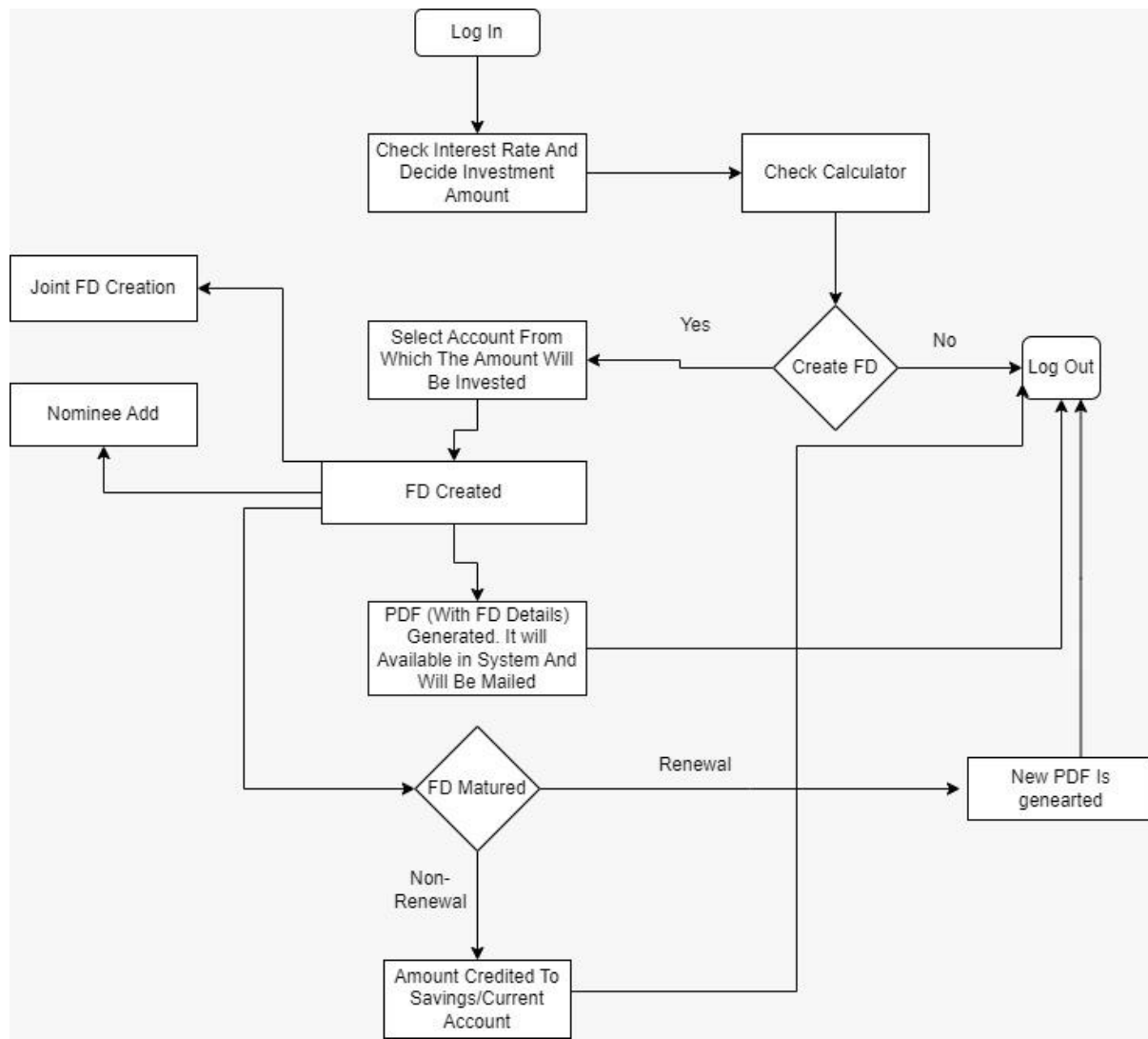## Stakeholders:

1) ABC Bank
2) Customers of ABC Bank
3) Management and staff of ABC Bank
4) Potential customers of the ABC Bank
5) Regulatory Bodies
6) IT Team

As-Is Diagram:

Future Process Map:

Flowchart:

- Log In
  - → Check Interest Rate And Decide Investment Amount
    - → Check Calculator
      - → Create FD (decision)
        - Yes → Select Account From Which The Amount Will Be Invested
          - → Joint FD Creation
          - → FD Created
            - → Nominee Add
            - → PDF (With FD Details) Generated. It will Available in System And Will Be Mailed
              - → FD Matured (decision)
                - Renewal → New PDF Is genearted → Log Out
                - Non-Renewal → Amount Credited To Savings/Current Account → Log Out
        - No → Log Out

Scope:

ABC bank is one leading bank across the globe. They want to go 100% online and they want to start the initiative by introducing E-Fixed Deposit. The bank wants to introduce the E-FD to their existing customers (who have account in the ABC Bank.) By introducing E-Fixed Deposit –

1. The time taken for creation of FD will be less. The customers will not be required to bank to create the FD and process will be seamless and hassle free.
2. The payment process will be extremely easy and can be done directly through net banking.

3. The renewal and closure process will be easier. As these processes will not be required to visit bank anymore.

Features Need To Be Developed:

1. Provision to create Fixed Deposit through the web portal and mobile app of ABC Bank.
2. Provision to select appropriate FD option based on tenure and interest rate for normal users and senior citizens.
3. Develop a calculator to get the matured amount by inserting amount, tenure and user age.
4. Provision to deduct investment amount from account. This case is applicable for the customers who have multiple account in the ABC Bank.
5. Provision to renew/ close fixed deposit from the E-FD system.
6. Provision to create joint fixed deposits by tagging the other customer's name and SSN ID.
7. Provision to add nominee along with the nominee's age. In case of minor nominee, his/her guardian's details will be added.
8. Provision of generation of PDF copy (carrying the details of the fixed deposit).
9. Provision to email automatically of the PDF copy to the registered email id.
10. Provision to reflect the PDF copy in the online bank account and mobile banking app.
11. Provision to generate reports by the employees of the ABC Bank.

In-Scope:

1. Creation of fixed deposit of the existing customers who have account with the ABC Bank via web-portal/mobile banking app.
2. Selection of one account (in case the customer has multiple bank accounts with ABC Bank) from which the amount of investment will be deducted.
3. Calculator to get the matured amount of a fixed deposit by inserting whether the customer's age (regular/senior citizen), amount to be invested, tenure of investment.
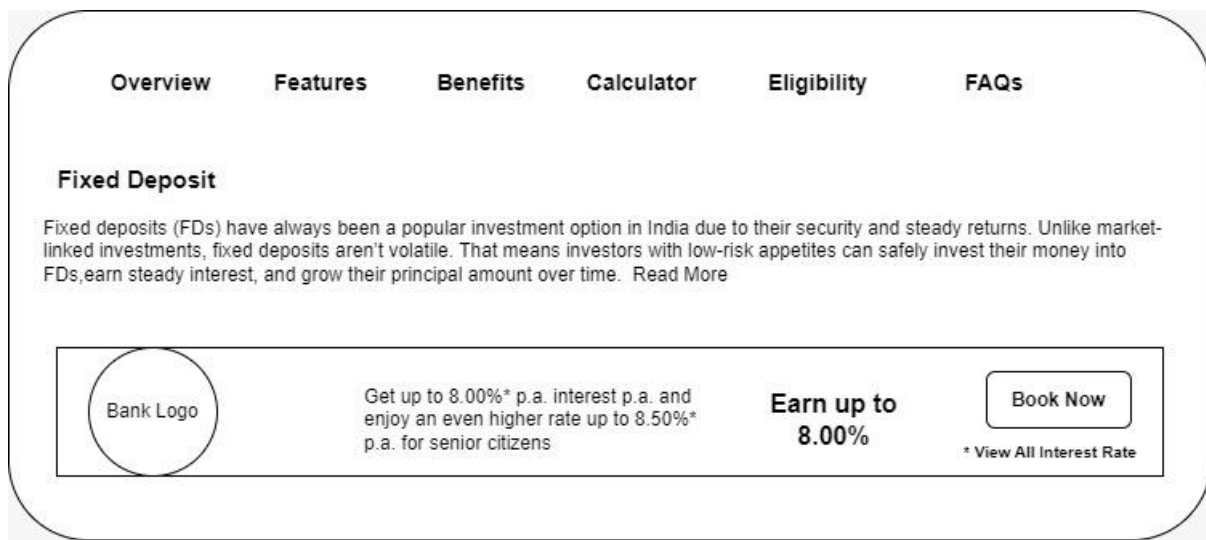4. Renewal/closing of Fixed Deposit.

5. Adding nominee.
6. Creating joint fixed deposit by tagging the other customer's name and SSN ID.
7. PDF generation with Fixed Deposit details.
8. Emailing (automatically) the PDF copy and also be available in the web-portal/mobile banking app.
9. Report generation.

Out of Scope:

1. Creation of Fixed Deposit by the users who do not have account with ABC Bank.
2. Transferring the Fixed Deposit.

Wireframe:

1. Overview Page of Online Banking:

| Overview | Features | Benefits | Calculator | Eligibility | FAQs |

Fixed Deposit

Fixed deposits (FDs) have always been a popular investment option in India due to their security and steady returns. Unlike market-linked investments, fixed deposits aren't volatile. That means investors with low-risk appetites can safely invest their money into FDs,earn steady interest, and grow their principal amount over time. Read More

Bank Logo

Get up to 8.00%* p.a. interest p.a. and enjoy an even higher rate up to 8.50%* p.a. for senior citizens

Earn up to 8.00%

Book Now

* View All Interest Rate

2. Calculator:

Calculate Fixed Deposit Returns With Ease

Customer Type	Deposit Amount	Interest Payment
○ General Citizen ○ Senior Citizen		On Maturity

Calculate Maturity Amount By

Tenure	Maturity Date

Tenure

2 Years	0 Months	0 Days

Interest Rate	Investment Amount	Maturity Amount	Creation Date	Maturity Date	Interest Earned
7.2%	10,00,000	11,53,406	14-04-2024	14-04-2026	1,53,406

Functional Requirement:

1. Customers:

a) Customer will be able to create a fixed deposit by logging in the web-portal/ mobile banking app.

b) The system can check if the customer has web-portal/ mobile banking app and account with the ABC Bank.

c) Details of the tenure and interest rate against the investment amount for normal customers and senior-citizens to be available within the system.

d) Calculator to get the matured amount against an investment based on tenure and age of the customer.

e) Options to choose from which account the amount will be deducted for the Fixed Deposit.

f) Options to close the fixed deposit and selection of account, where the matured amount will be credited.

g) Renew the fixed deposit.

h) Option to add nominee.

i) Option to create joint fixed deposit based on the partners name, SSN ID.
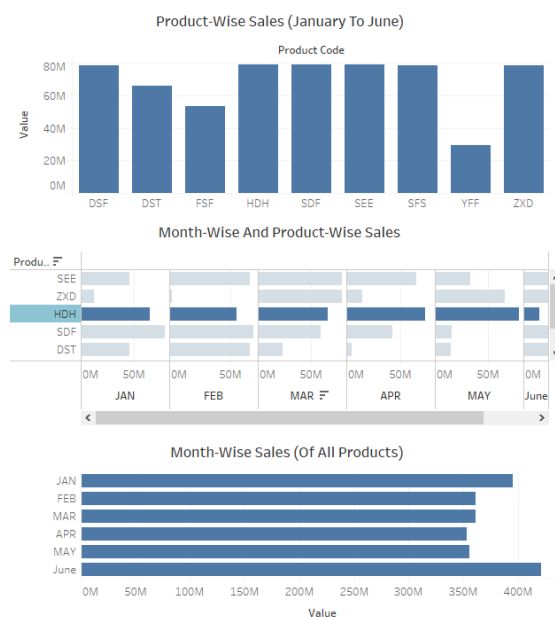
2. Bank Employee/ Management:

a) Generation of different reports by the bank employees/ management to get the amount invested based on tenure, interest paid etc.

b) Employees/ management will be able to export the reports in PDF and in excel.
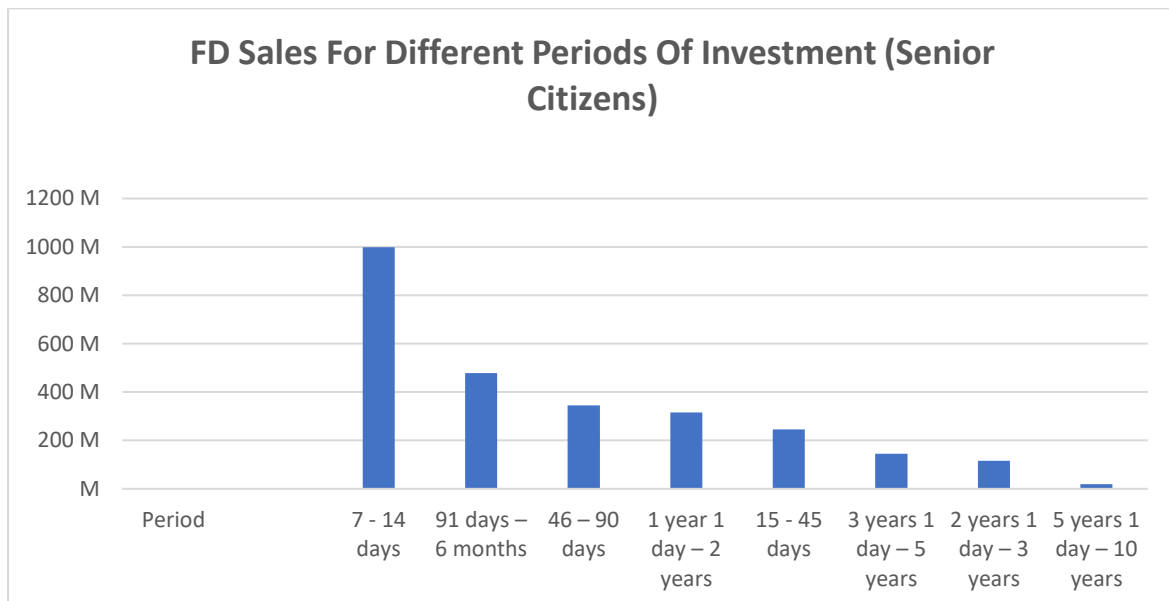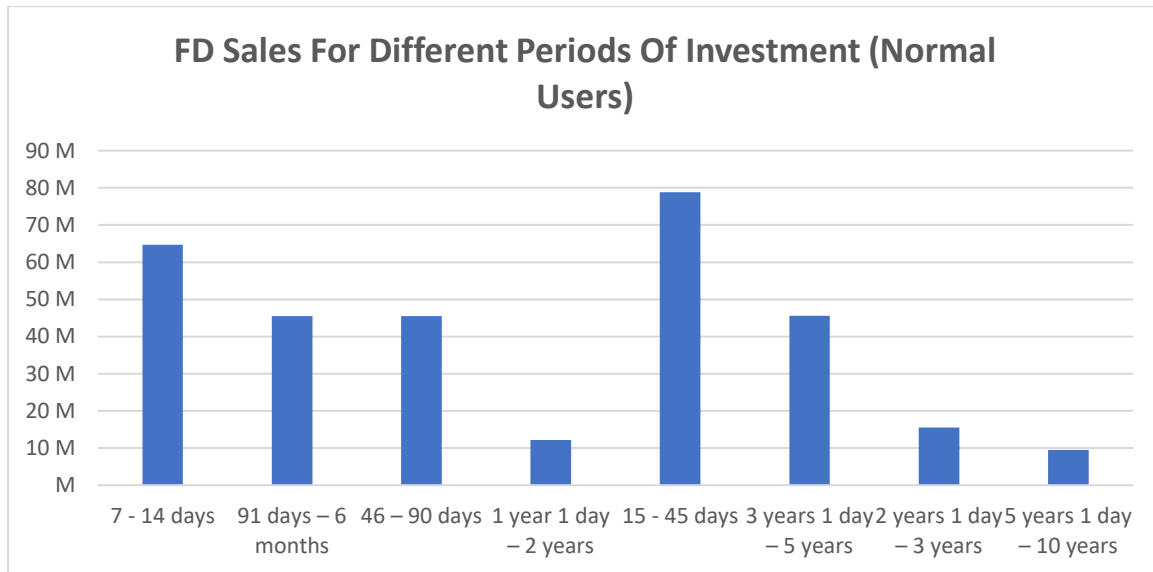
Non-Functional Requirement:

1. PDF will be generated with the details of the Fixed Deposit and will be automatically mailed to customer's registered email id.
2. PDF will also be available in the system and can be seen once log in the web-portal/ banking app.

Tableau Task:

Excel:

Question 1:

FD Sales For Different Periods Of Investment (Normal Users)

Period	Value
7 - 14 days	~65 M
91 days – 6 months	~45 M
46 – 90 days	~45 M
1 year 1 day – 2 years	~12 M
15 - 45 days	~79 M
3 years 1 day – 5 years	~45 M
2 years 1 day – 3 years	~16 M
5 years 1 day – 10 years	~9 M

FD Sales For Different Periods Of Investment (Senior Citizens)

Period	Value
7 - 14 days	~1000 M
91 days – 6 months	~480 M
46 – 90 days	~340 M
1 year 1 day – 2 years	~310 M
15 - 45 days	~240 M
3 years 1 day – 5 years	~140 M
2 years 1 day – 3 years	~110 M
5 years 1 day – 10 years	~20 M

Ascending Order:

Period	Rates for amounts <2 crores		
	User FDs created worth:	Senior Citizen FDs created	Total

Period	User FDs created worth:	Senior Citizen FDs created worth:	Total
		worth:	
5 years 1 day – 10 years	94,51,664	1,94,51,664	2,89,03,328
2 years 1 day – 3 years	1,54,84,844	11,54,84,844	13,09,69,688
3 years 1 day – 5 years	4,55,97,911	14,55,97,911	19,11,95,822
15 - 45 days	7,87,87,777	24,54,54,541	32,42,42,318
1 year 1 day – 2 years	1,21,21,451	31,54,84,844	32,76,06,295
46 – 90 days	4,54,54,541	34,54,44,578	39,08,99,119
91 days – 6 months	4,54,44,578	47,84,51,511	52,38,96,089
6 months 1 day to 1 year	7,84,51,511	51,21,21,451	59,05,72,962
7 - 14 days	6,47,26,472	99,89,89,888	1,06,37,16,360

Descending Order:

Period	Rates for amounts <2 crores		
	User FDs created worth:	Senior Citizen FDs created worth:	Total
7 - 14 days	6,47,26,472	99,89,89,888	1,06,37,16,360
6 months 1 day to 1 year	7,84,51,511	51,21,21,451	59,05,72,962
91 days – 6 months	4,54,44,578	47,84,51,511	52,38,96,089
46 – 90 days	4,54,54,541	34,54,44,578	39,08,99,119
1 year 1 day – 2 years	1,21,21,451	31,54,84,844	32,76,06,295
15 - 45 days	7,87,87,777	24,54,54,541	32,42,42,318
3 years 1 day – 5 years	4,55,97,911	14,55,97,911	19,11,95,822
2 years 1 day – 3 years	1,54,84,844	11,54,84,844	13,09,69,688
5 years 1 day – 10 years	94,51,664	1,94,51,664	2,89,03,328

Question 2:

=VLOOKUP(AD5,$AD$2:$AF$13,3,0)

		Rates for amounts <2 crores		Rates for amounts >=2 Crore to < 5 Crores				
Period								
	Product	User Rates	Senior Citizen Rates	User Rates	Senior Citizen Rates			
	Code							
7 - 14 days	HDH	3.00%	3.50%	3.50%	4.00%		1. Using vlookup for product code HDH, find the rate for senior citizens for amounts less than 2 crore.	3.5%
15 - 45 days	SDF	3.50%	4.00%	4.00%	4.50%			

=VLOOKUP(AD13,$AD$2:$AF$13,3,0)

	Product	User Rates	Senior Citizen Rates	User Rates	Senior Citizen Rates			AK	AL	AM
	Code									
15 - 45 days	SDF	3.50%	4.00%	4.00%	4.50%					
46 – 90 days	FSF	4.00%	4.50%	4.50%	5.00%		2. Using vlookup for product code YFF, find the rate for senior citizens for amounts less than 2 crore.	6.25%		
91 days – 6 months	SEE	4.50%	5.00%	5.00%	5.50%					
6 months 1 day to 1 year	SFS	5.00%	5.50%	5.60%	6.10%					
1 year 1 day – 2 years	ZXD	5.60%	6.10%	5.75%	6.25%					
2 years 1 day – 3 years	DSF	5.75%	6.25%	5.50%	6.10%					
3 years 1 day – 5 years	DST	5.75%	6.25%	5.50%	6.00%					
5 years 1 day – 10 years	YFF	5.75%	6.25%	5.50%	6.00%					

Product Backlog:

Internet Banking:

Epic/ Story ID	Title	Theme	Story Point	Acceptance Criteria	Iteration Path
Fixed Deposit-1/ FD-4	As a customer of ABC Bank, the customer can create a fixed deposit via online Banking account, mobile banking.	Internet Banking	7	Given that the customer has the access to online banking, if the customer is a valid and has account with ABC Bank then the customer can create a FD with ABC Bank.	Release 1/ Sprint 1
Fixed Deposit-1/ FD-5	The customer can check out different interest applicable on different tenure, investment amount and for normal/senior citizen so that the customer can chose from the options	Internet Banking	1	The customer can view the various FD plans offered by the bank with the following details – - Period (7 days to 10 years with appropriate interval) - Profile (Normal/senior citizen) - Amount invested (Rates for amount <1.5 million USD or >=1.5 million USD to <4	Release 1/ Sprint 1

				million USD)	Release 1/ Sprint 1
Fixed Deposit-1/ FD-6	The customer can use the calculator available in to get the maturity amount, interest earned based on the investment amount, interest rate, tenure and customer profile (normal/senior citizen).	Internet Banking	3	The customer can calculate the maturity amount and interest earned based on the interest rate given in the website by providing the below details – • Investment amount • Tenure • Profile • Interest payment interval (on maturity/ monthly/ quarterly/ half-yearly/ yearly)	
Fixed Deposit -1/ FD – 7	The customer can decide which ABC Bank account the customer wants the amount to deduct from	Internet Banking	3	The customer who holds multiple bank accounts in the ABC Bank should be able to choose from which account the amount will be deducted.	Release 1/ Sprint 1

Fixed Deposit - 1/ FD – 8	The customer can decide if the customer wants to renew the fixed deposit before the FD gets matured	Internet Banking	3	Before the FD gets matured the customer will be provided the option of renewal of the FD with a fixed tenure decided by the Administrator.	Release 1/ Sprint 1
Fixed Deposit – 1/ FD - 9	The customer can decide which ABC Bank account the customer wants the mature amount be credited in.	Internet Banking	3	In case the customer has multiple accounts (be it savings/current), the customer can decide in which account the customer wants the matured amount to be credited.	Release 1/ Sprint 1
Fixed Deposit - 1/ FD - 10	The customer can have the option of creating a joint FD with other customer of the ABC Bank	Internet Banking	2	During the creation of the FD the customer will have the option to create a joint FD with other customer of the ABC Bank. SSN details will be required to create the joint FD.	Release 1/ Sprint 1

Fixed Deposit - 1/ FD – 11	The customer can add nominee in the FD so that nominee is benefitted in case of unfortunate event	Internet Banking	2	The customer can add nominee in the fixed deposit with the following details of the nominee – • Name • Age • Relation In case of a minor nominee, guardian details are mandatory.	Release 1/ Sprint 1
Fixed Deposit - 1/ FD – 12	The customer will have a PDF copy (with all the details of Fixed Deposit) in the system and also this PDF copy will be emailed in the registered email id of the customer.	Internet Banking	2	A PDF copy will be generated once the Fixed Deposit is created with all the details of the Fixed Deposit. The PDF copy will be automatically be emailed to customer's email id and all will be available in the system for future reference.	Release 1/ Sprint 1

Mobile Banking:

Epic/ Story ID	Title	Theme	Story Point	Acceptance Criteria	Iteration Path
Fixed Deposit-2/ FD-13	As a customer of ABC Bank, the customer can create a fixed deposit via mobile application.	Mobile Application	7	Given that the customer has the access to mobile application, if the customer is a valid and has account with ABC Bank then the customer can create a FD with ABC Bank.	Release 1/ Sprint 2
Fixed Deposit-2/ FD-14	The customer can check out different interest applicable on different tenure, investment amount and for normal/senior citizen so that the customer can chose from the options	Mobile Application	1	The customer can view the various FD plans offered by the bank with the following details – • Period (7 days to 10 years with appropriate interval) • Profile (Normal/seni or citizen) • Amount invested (Rates for amount <1.5	Release 1/ Sprint 2

				million USD or >=1.5 million USD to <4 million USD)	
Fixed Deposit-2/ FD-15	The customer can use the calculator available in to get the maturity amount, interest earned based on the investment amount, interest rate, tenure and customer profile (normal/senior citizen).	Mobile Application	3	The customer can calculate the maturity amount and interest earned based on the interest rate given in the website by providing the below details – - Investment amount - Tenure - Profile - Interest payment interval (on maturity/ monthly/ quarterly/ half-yearly/ yearly)	Release 1/ Sprint 2
Fixed Deposit -2/ FD – 16	The customer can decide which ABC Bank account the customer wants the amount to deduct from	Mobile Application	3	The customer who holds multiple bank accounts in the ABC Bank should be able to choose from which account the amount will be deducted.	Release 1/ Sprint 2

Fixed Deposit -2/ FD – 17	The customer can decide if the customer wants to renew the fixed deposit before the FD gets matured	Mobile Application	2	Before the FD gets matured the customer will be provided the option of renewal of the FD with a fixed tenure decided by the Administrator.	Release 1/ Sprint 2
Fixed Deposit – 2/ FD - 18	The customer can decide which ABC Bank account the customer wants the mature amount be credited in.	Mobile Application	2	In case the customer has multiple accounts (be it savings/current), the customer can decide in which account the customer wants the matured amount to be credited.	Release 1/ Sprint 2
Fixed Deposit -2/ FD - 19	The customer can have the option of creating a joint	Mobile Application	2	During the creation of the FD the customer will have the option to create	Release 1/ Sprint 2

	FD with other customer of the ABC Bank			a joint FD with other customer of the ABC Bank. SSN details will be required to create the joint FD.	
Fixed Deposit -2/ FD – 20	The customer can add nominee in the FD so that nominee is benefitted in case of unfortunate event	Mobile Application	2	The customer can add nominee in the fixed deposit with the following details of the nominee – • Name • Age • Relation In case of a minor nominee, guardian details are mandatory.	Release 1/ Sprint 2
Fixed Deposit -2/ FD – 21	The customer will have a PDF copy (with all the details of Fixed Deposit) in the system and also this PDF copy will be emailed in the registered email id of the customer.	Mobile Application	2	A PDF copy will be generated once the Fixed Deposit is created with all the details of the Fixed Deposit. The PDF copy will be automatically be emailed to customer's email id and all will be available in the	Release 1/ Sprint 2

				system for future reference.	

Reports:

Epic/ Story ID	Title	Theme	Story Point	Acceptance Criteria	Iteration Path
Fixed Deposit -3/ FD – 22	An employee can generate below reports to make better decisions – • Total value of FDs for user for tenure less than 6 months for normal customers • Total value of FDs for user for tenure less than 6 months • Total values of FDs for user for tenure 6 months 1 day and 1 year for normal user. • Total values of FDs for user for tenure 6 months 1 day and 1 year for senior citizens. • Number of FDs that are more than 1.5 million USD for normal users.	Backend	5 per Report	As an employee of the ABC Bank, one can generate and view the reports.	Release 1/ Sprint 3

	• Number of FDs that are more than 1.5 million USD for senior citizens .				
Fixed Deposit -3/ FD – 23	An employee can download the reports in excel format to analyse the data	Backend	1 per report	An employee of the ABC Bank can download the report with a click of a button	Release 1/ Sprint 3