



# Family Planning

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**Overview**

**1.**

**4.**

**Repository  
Strategy**

**2.**

**Problem  
Statement**

**5.**

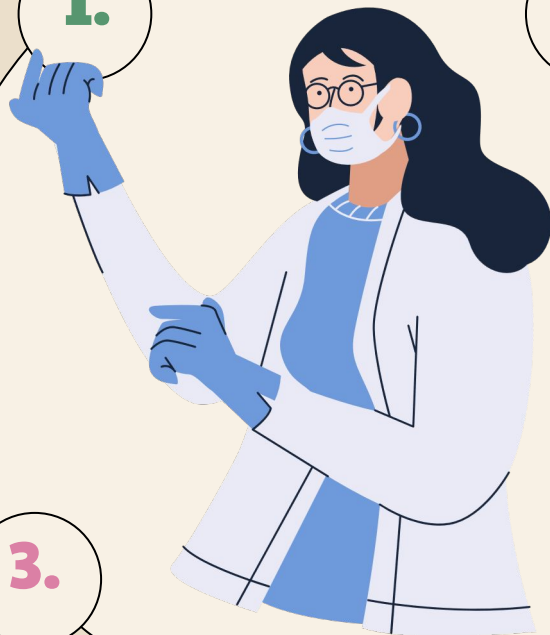
**Team  
Contributions**

**3.**

**Team Structure**

**6.**

**Demo**



# Overview

Our project focuses on transforming the manual Family Planning Register into a computer-based system tailored for the clinic's workflow.



# Overview Cont.

01.

Patient  
Registration

02.

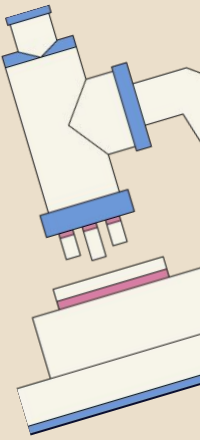
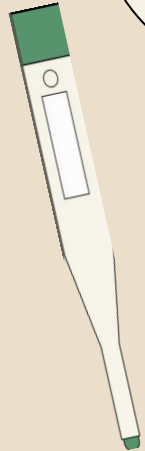
Record  
Visits

03.

Tracks  
Contraceptive  
methods  
issued

04.

Generate  
Monthly  
Report





# Overview Cont.

Clinic \_\_\_\_\_

District \_\_\_\_\_

Region \_\_\_\_\_

Report is to be submitted Monthly to DHMT or  
to RHMT with copies to relevant agency

## Form B (monthly family planning report)

Tick one: a. single clinic, monthly  
b. clinic aggregate  
c. district stores  
d. regional stores

Month: \_\_\_\_\_

Year: \_\_\_\_\_

### District Use Only

- a. Total clinic
- b. WFP
- c. %WFP (b/a\*100)
- d. report expected
- e. report received
- f. %reporting (e/d\*100)

		CONDOM										Sterilization									
		LO - FEM	OVETTE	Male	Female	COPPER T	MICRO - G	Mini - N	Postiner 2	Sampoo	Depo	F/Steriliz	Vasect	LAM	Natural	Norinylon	No				
<b>STOCK BALANCE</b>																					
1.	Beginning Balance																				
2.	Received																				
3.	Issued / Dispensed																				
4.	Transferred (circle one)																				
MOH / GRMA / PPAG / CC / Private																					
5.	Less / Demonstration / Expired																				
6.	Ending Balance [(1+2-3-4-5)]																				
(Check physical stock to Tally)																					
<b>STOCK REQUIRED</b>																					
7.	Line 3 x number of months required (e.g. SDHT x 3 / DHMT x 4 / RHMT x 5)																				
8.	Quantity Required (line 7 - line 6)																				
<b>FUNDS COLLECTED</b>																					
9.	Unit Price [Cedis]	TOTAL	150/cycle	150/cycle	5 pieces/100	300/piece	1000/unit	150/cycle	150/cycle	5000/pack	25 / tab	1000/dose				1500/dose	200				
10.	CEDIS collected: line 3 x line 9																				
11.	CEDIS RETAINED: SDHS 50% x line 10																				
	DHMT 10% x line 10																				
	RHMT 10% x line 10																				
12.	CEDIS SUBMITTED:																				
	SDHS - DHMT 50% x line 10																				
	DHMT - REG. 40% x line 10																				
	RHMT - CENT. ACC. 30% x line 10																				
<b>ACCEPTORS BY METHOD</b>																					
13(a)	NEW ACCEPTORS (1st Ever Users)																				
(b)	Continuing																				
(c)	TOTAL																				
14.	TOTAL VISITS (from tally sheet)																				
15.	Couple Years of Protection																				

CYP Factors

Pills = 13 cycles/CYP

IUD = 3.5 CYP/insertion

Condoms = 120 pieces/CYP

Norplant = 3.5 CYP/insertion

VFTs = 120 cycles/CYP

Sterilisation = 11 CYP/procedure

LAM = Depo Provera = 4 doses/CYP

Vasectomy = 10 CYP/procedure

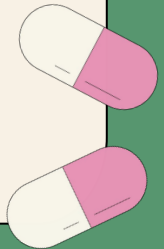
Norinylon = 12 doses per CYP

Natural = 2 CYP/luser

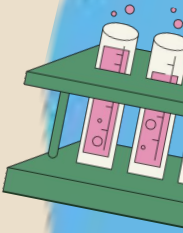
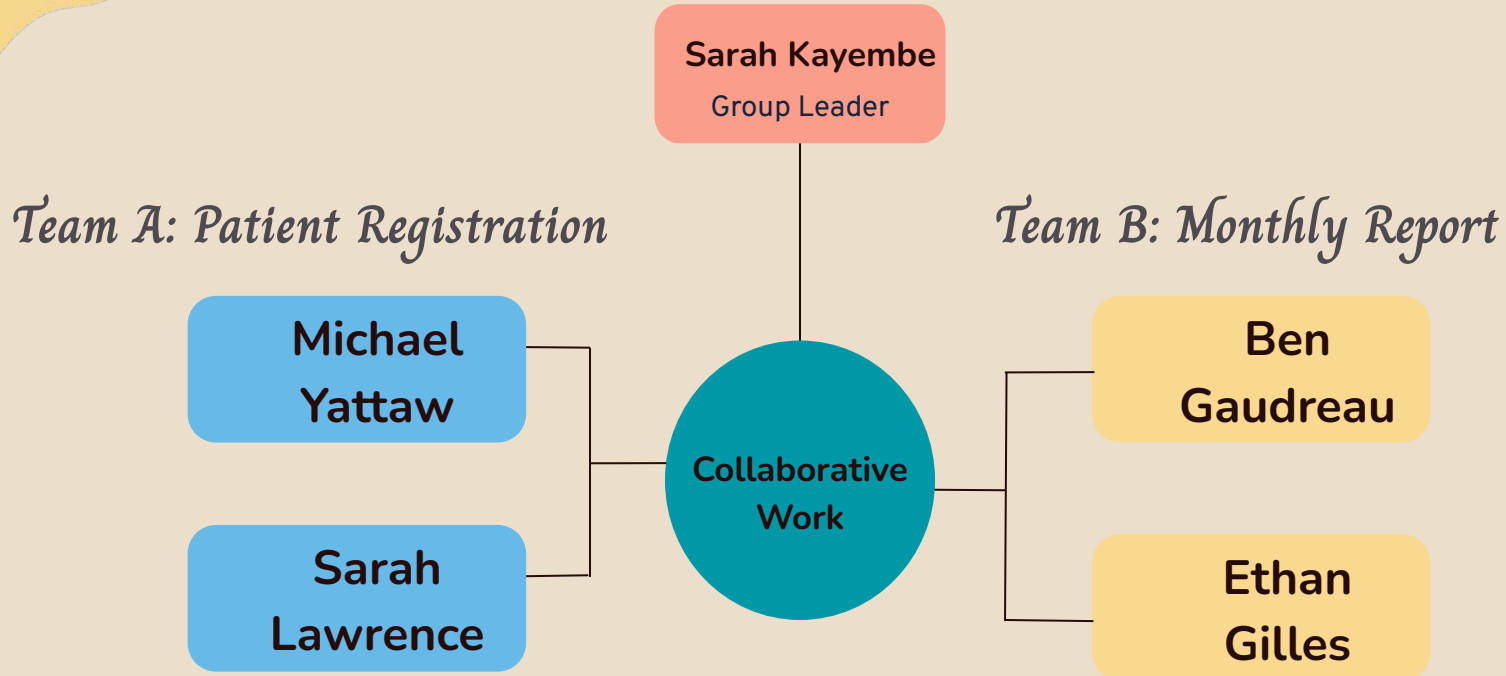
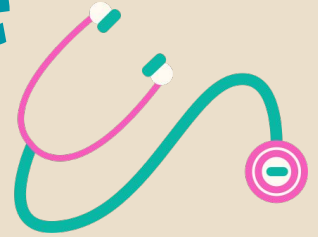
# Problem Statement

The manual system made it hard to track patients, update records, and complete monthly reports. These documents were paper-based, and paper records are easily lost, damaged, or misplaced, leading to gaps in patient history and inaccurate reporting.

Hence the need to digitize the system.

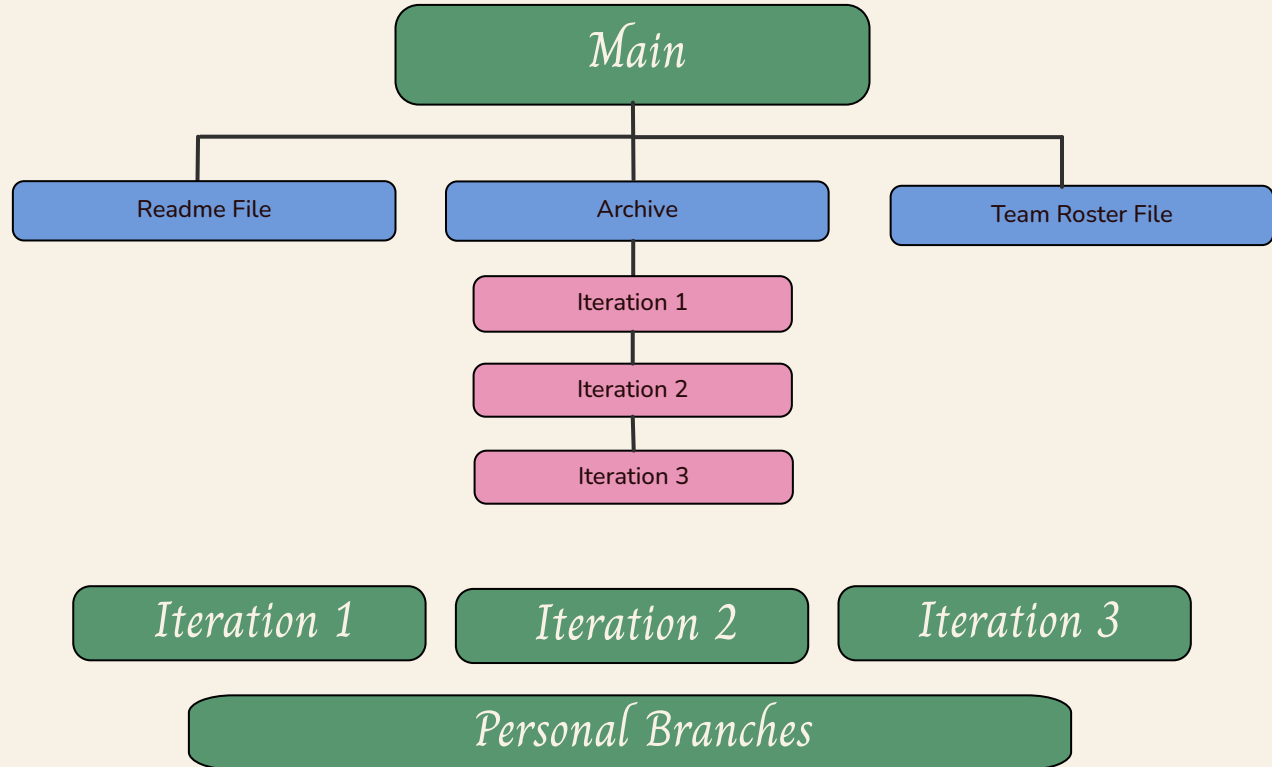


# Team Structure

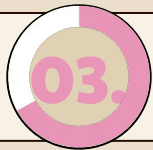
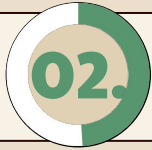
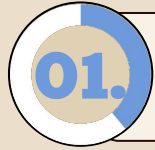





# Repository Strategy



# Team Lead




## Throughout All Iterations



Oversaw the project to ensure all requirements were met for each iteration.



Created Use Case Diagrams and wrote Use Case Descriptions.



Set up and tested the database before the decision was made to scrap database usage.



Communicated all updates and information to the team to keep everyone aligned.

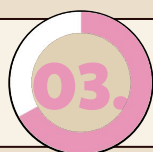
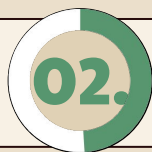
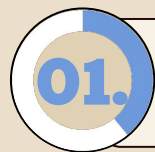


Ensured each team member had the information needed to begin their assigned tasks.




Wrote all reports for each iteration.


# Team Lead



Throughout All Iterations



Identified significant accomplishments, major issues, and models that needed refactoring for the next iteration.



Coordinated with the other team's leader as needed for shared data structures and updates.



Created the presentation slides for the project, with input from each Team Pair

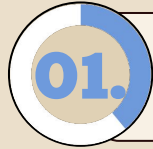


Pushed finalized code changes to the main branch after review and readiness



Organized and stored all documentation in the correct project folders.

# Team A



## Iteration: Documentation

Uml Diagram

Written Use Cases

Draft code

### Monthly Report Use Cases

Create Monthly Report	
Actors	Nurse, Nurse Supervisor
Preconditions	<ul style="list-style-type: none"><li>• The nurse is logged into the system.</li><li>• The nurse has the necessary permissions to generate the monthly report.</li></ul>
Normal Flow	<ol style="list-style-type: none"><li>1. The nurse logs into the system.</li><li>2. The nurse generates the monthly report.</li><li>3. The nurse modifies and completes the report.</li><li>4. The nurse submits the report.</li><li>5. The system notifies the nurse supervisor that the report is ready for review.</li><li>6. The nurse supervisor reviews the report.</li><li>7. The nurse supervisor approves the report.</li></ol>

```
package edu.usm.healthsystem.report;
```

```
import edu.usm.healthsystem.model.Client;
```

```
/**
```

```
 * Implementation of Report for generating patient-specific reports.
```

```
 */
```

```
✓ public class PatientReport implements Report {
```

```
    /**
```

```
     * Generates a detailed report for a patient.
```

```
     * @param client The patient to generate the report for
```

```
     */
```

```
    @Override
```

```
    public void generate(Client client) {
```

```
        // TODO: Implement patient report generation
```

```
    }
```

```
}
```

# Team A Cont.

02.

## Iteration: Adding Core Use Cases



Coded the “generate()”  
method for  
PatientReport.java

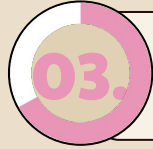
Coded the “generate()”  
method for  
Appointment.java

Adjusted the code  
format so it’s more  
cohesive.

Created Unit Tests for  
the patient report and  
appointment  
generation using JUnit



# Team A Cont.



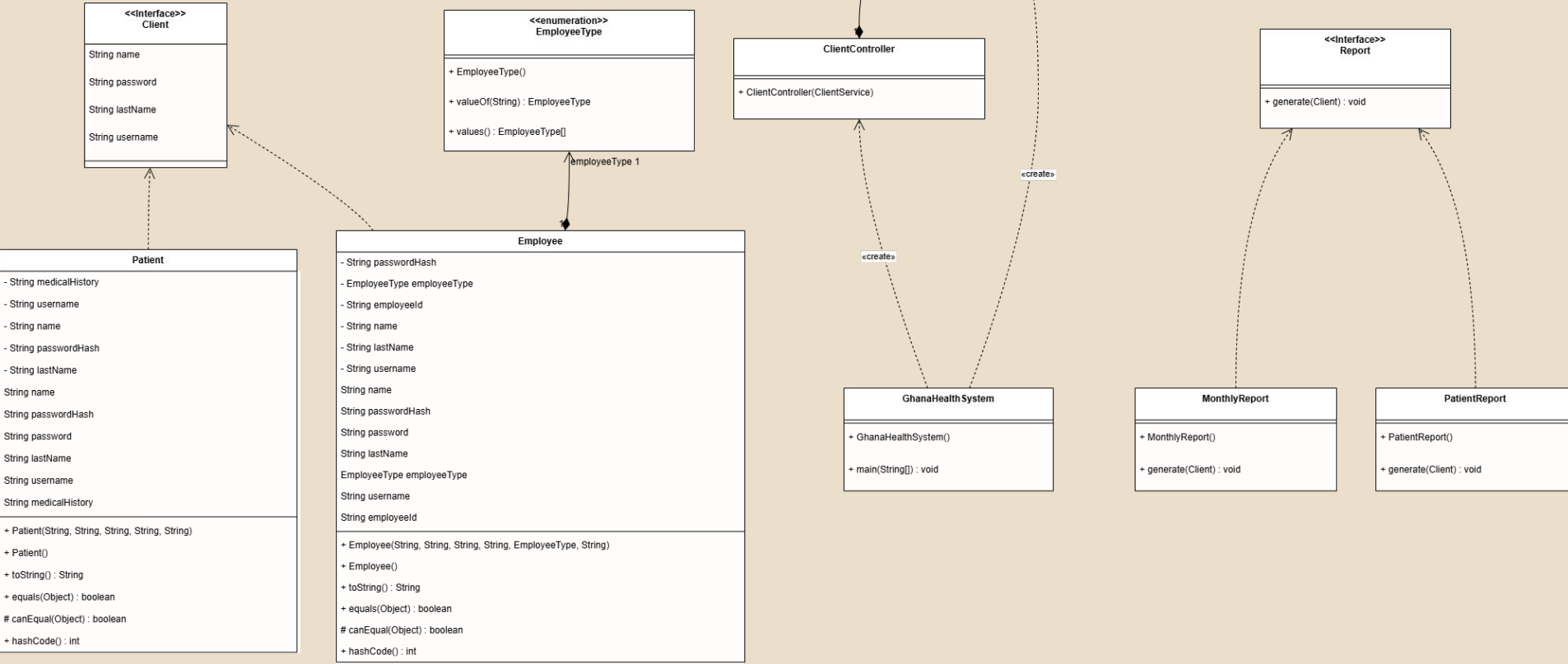
## Iteration: User Interface

Created a starter UI for generating Family Planning Client Report

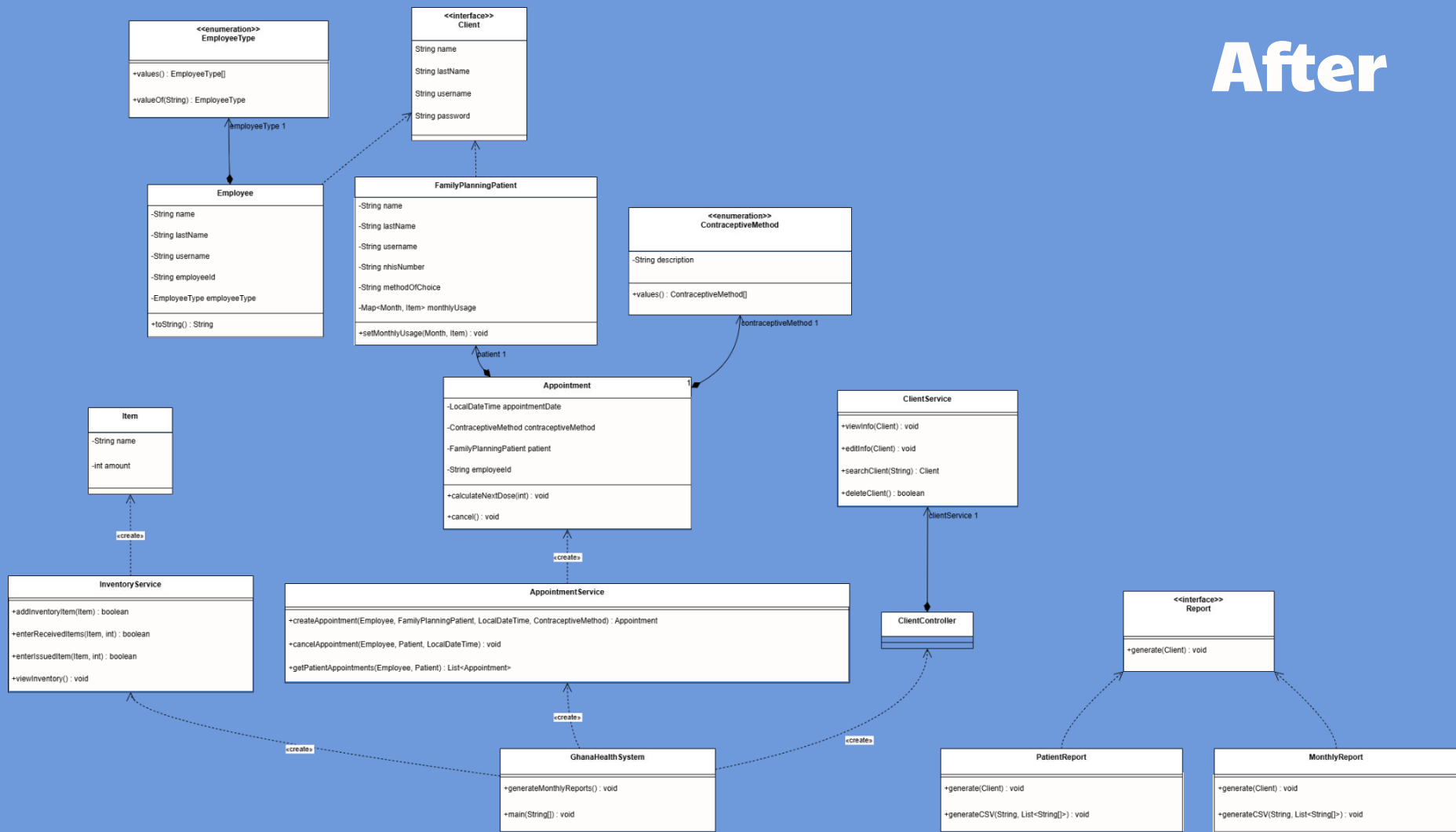
Created: “Generate Report”, “Preview Report”, “Create Patient”, “Delete Patient”, and “Appointment” buttons

Some future features: allowing the user to edit patient info, make it so when an appointment is made it updates the client report

# Before



# After





# Team B

01.

## Iteration: Documentation

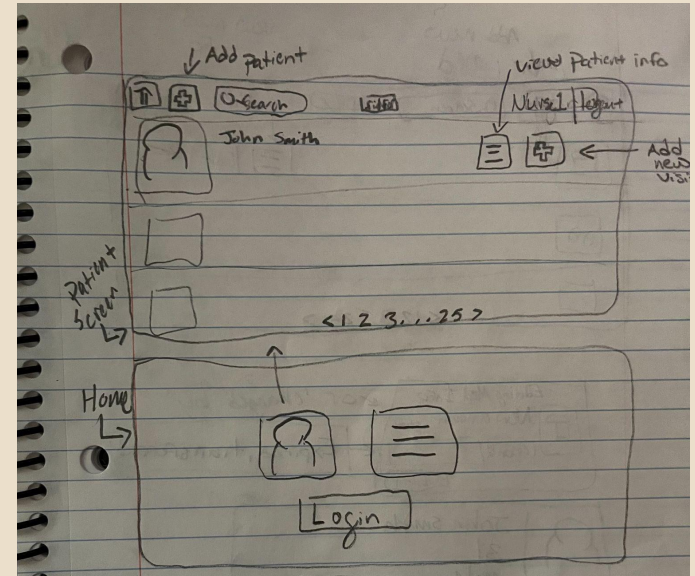
Created Draft API

Created UI Sketch

Created Domain Model

### Info Needed for Monthly Report

- Clinic
- Region
- District
- Beginning Stock
- Received Stock
- Issued Stock
- Transferred Stock (how much and where)
- Loss/Expired Stock
- End of Month Stock
- Number of months required for stock
- Quantity to order
- New Acceptors
- Continuing Acceptors
- Total Visits
- Couple-Years of Protection



# Team B Cont.

02.

## Iteration: Adding Core Use Cases

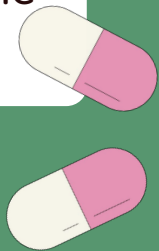


Coded the “generate()”  
method for  
MonthlyReport.java

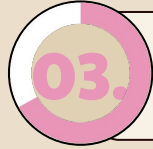
Created Unit Tests for  
the monthly report  
generation using JUnit

Adjusted the domain  
model to match the  
adjustments made in  
the code.

Created  
InventoryService.java  
which keeps track of  
inventory items and  
transactions with the  
system.



# Team B Cont.

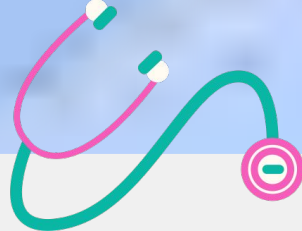


## Iteration: User Interface

Created a starter UI and worked with the Patient Team to integrate it into the project

Created: “Generate Report” “Set Stock” and “Preview Report” buttons and functionality

Created the dialog box for “Add Transaction” button and connected it to the inventory service



# Demo!

