### PCS AUTOMATION

Developed By

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# 

# NIIT

### PCS AUTOMATION

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Name of the Coordinator : LOPAMUDRA BERA

Name of the Developer : ARPAN BHADRA

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**NIIT**

###### CERTIFICATE

This is to certify that this report, titled **PCS AUTOMATION** embodies the original work done by **Mr.ARPAN BHADRA**, in partial fullfillment of his course requirement at NIIT.

Coordinator : LOPAMUDRA BERA

### ACKNOWLEDGEMENT

I would like to express my special thanks of gratitude to my teacher **LOPAMUDRA BERA** as well as to the education institute **NIIT** who gave me the golden opportunity to do this wonderful project on the topic **PROFESSIONET CONSULTANCY SERVICES**, which also helped me in doing a lot of Research and I came to know about so many new things I am really thankful to them.  
Secondly I would also like to thank my parents and friends who helped me a lot in finalizing this project within the limited time frame.

### ABSTRACT

This project manages the entire process of allocating project to existing employees as per his/her skillset working in that company

Its also provides single window system to Employee, HR and Project Managers of a company to cater the skill specific requirements emerging in Projects.

### CONFIGURATION

Hardware:8GB RAM,2GB GRAPHICS CARD,1 TB HARD DISK,INTEL I3 8TH GENERATION PROCESSOR

Operating System:WINDOWS 10

Software:ECLIPSE 2019,MY SQL

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Challenges

Observations

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### AIM

To create an application that operates via online recruiting website. Which stored the Records in Data Base and Also retriving it.

### OBJECTIVES

Following are the objectives to be achieved through Skill Mapping Application

* User registration
* Skill map
* Job Postings
* Profile Validation
* Recruitment

This objectives are to be automated which were previously done manually.

### CASE STUDY

### LITERATURE RESEARCH

**Introduction**

**Background Information**

**Research Findings**

**Conclusion**

### STATEMENT OF REQUIREMENTS

PROJECT OBJECTIVES

|  |  |
| --- | --- |
| Title | PCS Automation |
| Subtitle | Employee Management System |
| Author(s) | Arpan Bhadra |
| Author’s E-mail | arpan.kb@gmail.com |
| Author’s Phone | 9804839407 |
| Description | Automated Consultancy Service |
| Version | 1.00 |

**About Your Company**

Professionet Consultancy Services(PCS) is a business consultancy which provides a wide range of business services to clients.

**Need for Process Automation**

* Adds consistency and quality to recruitment
* Improves the productivity of HR team
* Saves time by easing the workload
* Enables organizations to find the right talent

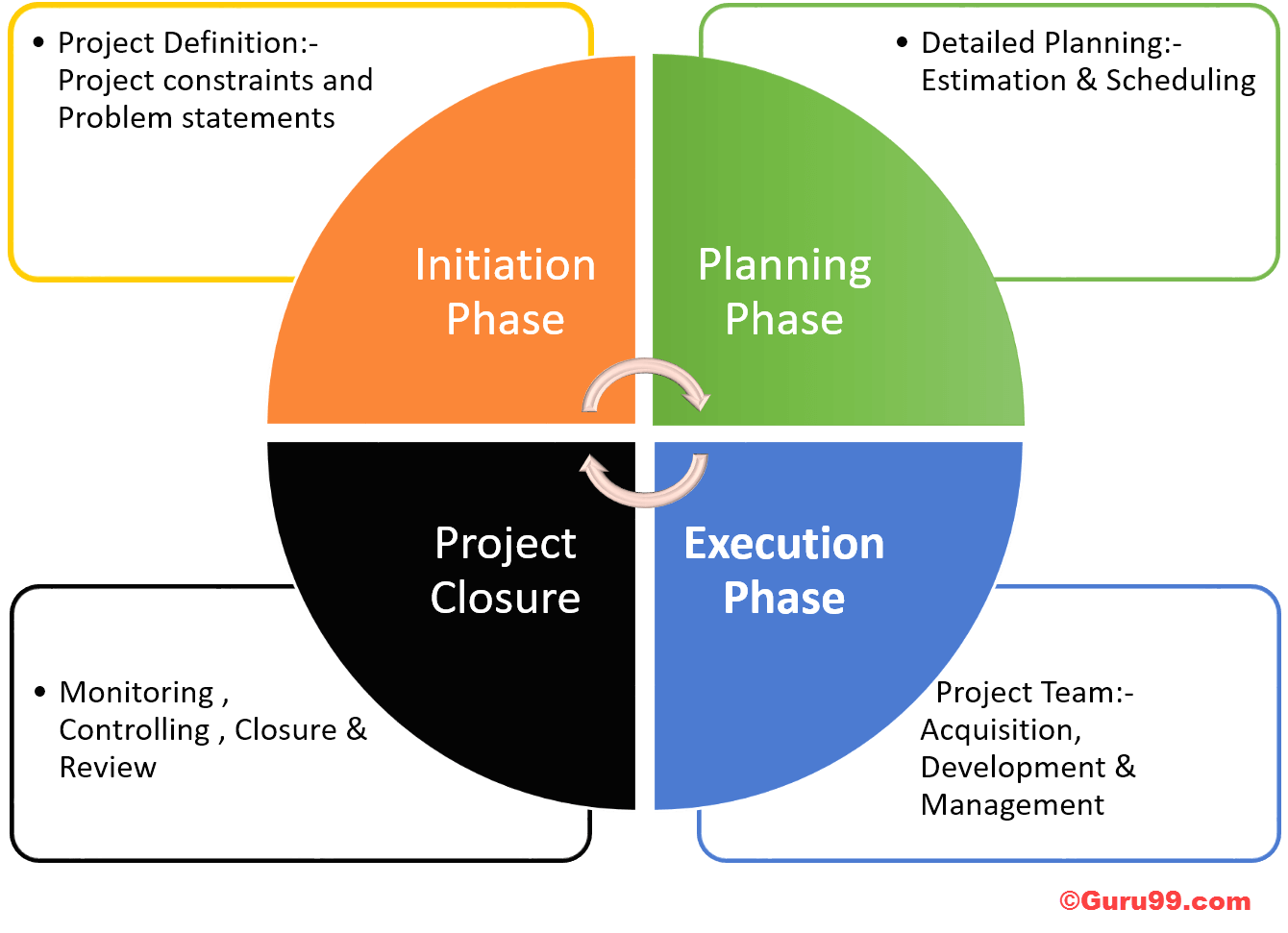
**Software Requirements**

* JRE
* ECLIPSE
* MYSQL

**Benefits**

* Improves the Recruitment Qualities.
* Pre-Screening of Candidates.

### PROJECT LIFE CYCLE MODEL



**The Initiation Phase:** The initiation phase aims to define and authorize the project.

**Vision:Automate the Selection Process**

**The Planning Phase:** The purpose of this phase is to lay down a detailed strategy of how the project has to be performed and how to make it a success.

Strategic Planning- overall approach to the project

Implementation Planning-ways to apply the decisions

**The Execution Phase:** In this phase, the decisions and activities defined during the planning phase are implemented.

**The Termination Phase:** This is the last phase of any project, and it marks the official closure of the project.

### SYSTEM ARCHITECTURE

1. Tier Architecture
2. A **Presentation Layer** that sends content to browsers in the form of HTML/JS/CSS. This might leverage frameworks like React, Angular, Ember, Aurora, etc.
3. An **Application Layer** that uses an application server and processes the business logic for the application. This might be written in C#, Java, C++, Python, Ruby, etc.
4. A **Data Layer** which is a database management system that provides access to application data. This could be MSSQL, MySQL, Oracle, or PostgreSQL, Mongo, etc.

**GUI Component**

(Login,Registration,HRA,EMP,PME)

**Presentation Layer**

**DATABASE**

(Tables-Emp,Job,

Skill,EmpSkill

EmpJob)

**Code**

Controller

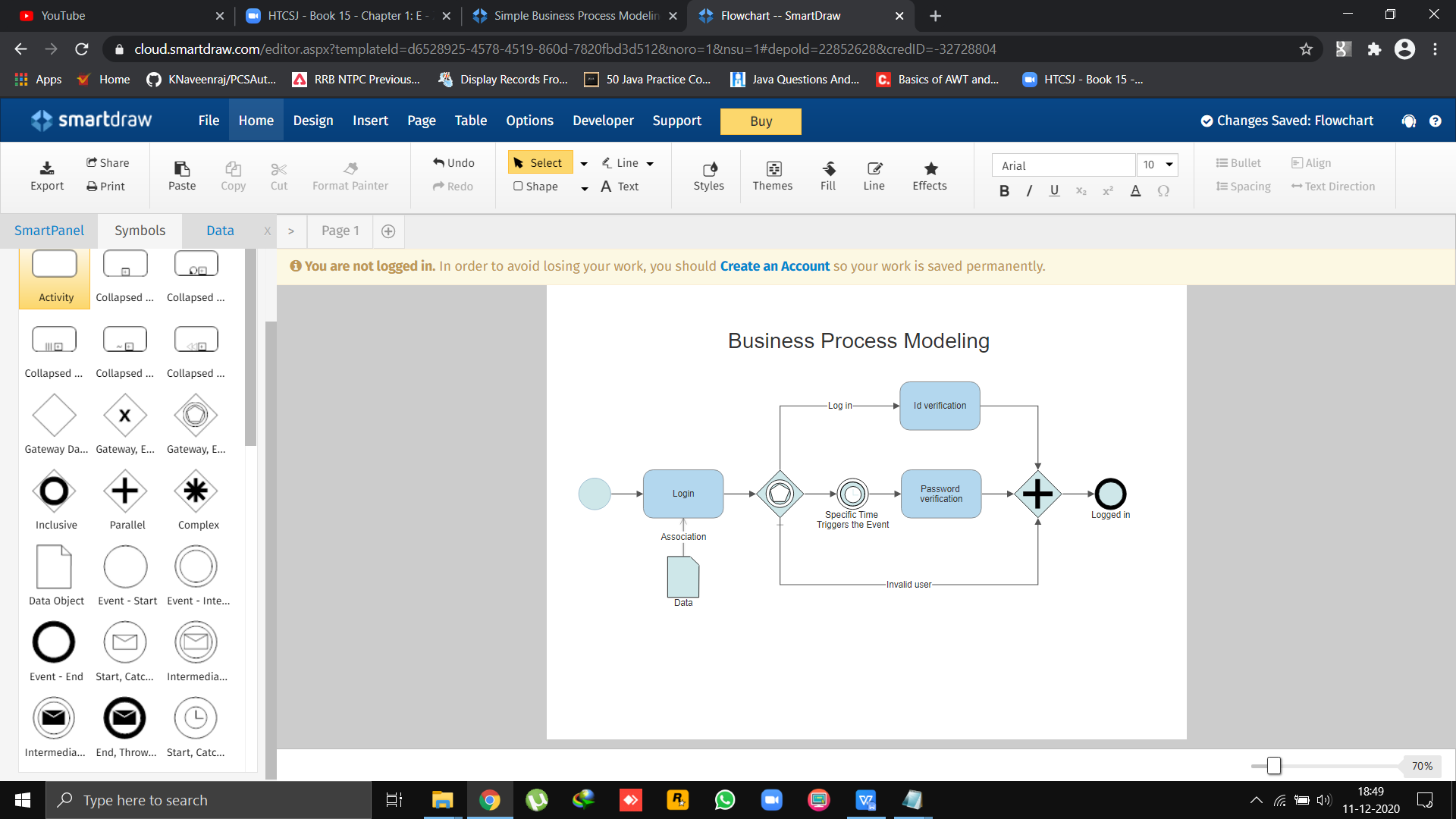
Gui Code

**JDBC Connectivity**

**JRE**

**Application Layer**  **Data Access Layer**

### BUSINESS PROCESS MODEL



Business process modeling (or) process modeling, is the analytical representation or put simply an illustration of an organization’s business processes. Modeling processes is a critical component for effective [business process management](https://kissflow.com/bpm/business-process-management-overview/).

Benefits of business process modeling:

* Gives everyone a clear understanding of how the process works
* Provides consistency and controls the process
* Identifies and eliminates redundancies and inefficiencies
* Sets a clear starting and ending to the process

##### SOFTWARE REQUIREMNETS SPECIFICATION

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3.7 Other requirements

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**HIGH LEVEL USER CASE DIAGRAMS**

Login

Registration

**Role Check**

HRA

EMP

PME

PME

EMP

HRA

New user

Registration

View skill-wise Employee list

View All available skills

Add Job

View all jobs

View skill wise jobs

View Employee list who applied for job

Deactivate Job

Logout

View profile

Update Profile

Update Skill

Apply Job

Logout

Activate employee

Deactivate employee

View all employees

View Selective employees

Add Skill

View all skills

Deactivate skill

Logout

GUI CODE

DATABASE

JDBC

Operation

CODE

CODE

#### **LOW LEVEL USER CASE DIAGRAMS**

EMP PME HRA

Application

Layer

User Interface Layer

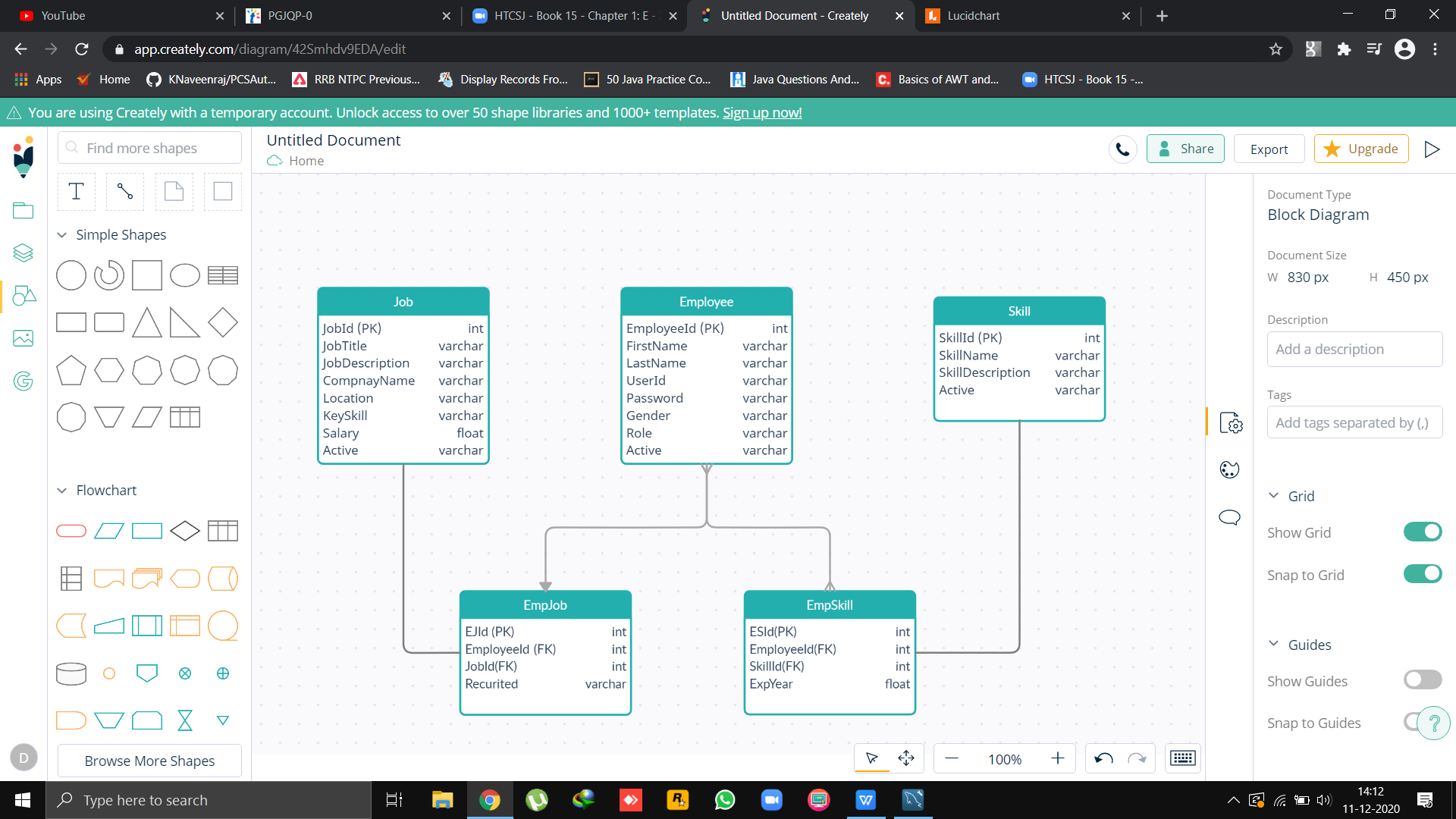
Database

Layer

### USER INTERFACE DESIGN

### SYSTEM INPUT AND OUTPUT DESIGN

### DATABASE STRUCTURE



//SQL Script

Create pcsdb Data Base in mysql

use pcsdb;

-- Creating Table:: Employee

create table Employee(

empId int auto\_increment,

FirstName varchar(30) not null,

LastName varchar(30) not null,

UserId varchar(30) not null,

Password varchar(20) not null,

Role varchar(3) not null,

Gender varchar(10) not null,

Active varchar(10) not null,

primary key(empId)

);

-- Creating Table:: empjob

CREATE TABLE EmpJob (

create table empJob(

EJId int auto\_increment ,

EmployeeId int not null ,

JobId int not null,

Recruited varchar(10)not null,

primary key(EJId)

);

);

-- Creating Table:: empskill

create table empSkill(

ESId int auto\_increment ,

EmployeeId int not null ,

SkillId int not null,

ExpYear int not null,

primary key(ESID)

);

-- Creating Table:: job

create table job(

jobId int auto\_increment,

jobTitle varchar(10) not null,

jobDescription varchar(30) not null,

companyName varchar(30) not null,

location varchar(20) not null,

keySkill varchar(10) not null,

salary decimal(8,2) not null,

Active varchar(10) not null,

primary key(jobId)

);

-- Creating Table:: skill

create table skill(

skillId int auto\_increment,

skillName varchar(20) not null,

skillDescription varchar(30) not null,

Active varchar(10) not null,

primary key(skillId)

);

Select \* from employee;

Select \* from skill;

Select \* from job;

Select \* from empSkill;

Select \* from empJob;

### ENTITY RELATIONSHIP DIAGRAM

### DATA MODEL

### CLASS DIAGRAMS

### ACTIVITY DIAGRAMS

### SEQUENCE DIAGRAMS

### USER-CENTERED INTERFACE DESIGNS

### PERSONAS

### PAPER PROTOTYPES