

N. P. IS. Alex and I chose this card, because I like program computers and I have fun with this, so why don't be doing my job. And I learn about the introduction of programming, one of them is learning, we discuss kind of sign. As you can see, PROSESOR USC → GitHub.

JRE → JDK → IDE

02 Proj. Descrip.

Artifacts - Analysis - Discos - Requirements - Entradas - etc

Git

Use git hub

clone → solo
pull → solo

Deber: Entradas Usarios.

- Nombre Usuario:
- Empresa / Sitio
- Contactos: Teléfono
- Carga:

git add -a → all

git commit -m " "

Hidden Figures
The imitation game

JAVA : NEED

```
graph TD; JAVA --> JRE; JAVA --> JDK; JAVA --> NetBeans[NetBeans (IDE)]; JRE --> JUN; 
```

Java → San Niros Systems (old)
 → Oracle (new)

EDD → 1-2

Aprende a leer datos en java
 → Pedir usuario la tabla que desea

1) What multiplication table do you want to see (for)

1) Enter multi a number

1) if the number is even or odd (if)

1) ask again for the table number and even/odd and eat(while)

Lunes

Importante OPTIONS OOP, PP. Pascal, NODE, JAVAS, ETC

Importante → Como programar

Declaracion → Que quiero que haga

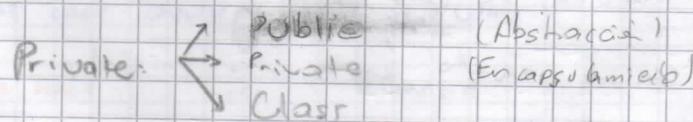
Concepts OO

Encapsulado → Palabra reservada

private

Abstraction → Palabras public

Classification



Clase → Es singular

REFACTORING → CHANGE IDENTIFIERS

DEBER: Objetos → Proyectos

Clases → Mayúsculas

UFML.

Objetos, variables, métodos → Minusculas

Camel Case

← → myChicken

Atributos (-)

Métodos (+o -)

Project.

1. List objects

2. Attributes and operations for the Objects

3. Model using paper and pen

4. Create classes in Java - Netbeans.

WSO4 UML ; UML Associations

WSL2 From UML to Code → UML Exercise

snake-case

camelCase

Capital (7.000 Mayus)

Lower camel case — small case

Upper camel case

Lower case

Snake-case

Upper case

upper_snake_case

Ctrl-F (buscador)



----> Depende de

----> Agregado de

Associations

(more hard than dependencies)
(contains objects)

► Diseño siempre en tercera persona.

► Asociación → Relación atributo de una clase

► Dependencia → Relación función de una clase

• constructor → método → crea un objeto con valores iniciales

Por defecto vacío Con parámetros

INSPECTIONS

and

WALKTHROUGH

setters
getters

) METHODS QUE SACAN INFORMACIÓN

Temas
Names
A UML

Diagrama = Nuevas Clases
 - Atributos (Gusta)

B

- Metodos Métodos

C

→ Se bautiza por global no por errores

E

↳ Línea ↳

Aggregations → (include) (contains) Subpart

Refine Aggregation Aggregate the same class

- Reflexive
- Asymmetrical

→ Transitive

Composition → Ciclo de vida STRONG

Case Diagram

Actors ↗ Users
 ↗ Other system
 ↗ Hardware

• Begin with verb

Use case answer what + and why

Inheritance

→ General

Substitutability

Files .	, CSV	Comma separate value
	* XML	XML markup language
	* JSON	Java script notation

Exceptions

Inherac.

Polimorf. physm

Try catch

extends

@Override

- Json libreria (Gson).

Unit test

API

GUI → Graphical user interface → Desktop app.

Polymorphism: - polymorphic objects

@ annotations

- Overriding () ;

- Overloading () { ... }

Type of parameters / number of parameters

Dark Box in cloud

Access throughout the cloud

Company should not buy hardware

Mongo DB --- Atlas

Free storage for everyone

Insertar datos

Leer datos

Renover datos

} nube

User Mongo shell

Buscar MongoDB compass

Aplicación

Mecánicas - Tubos de vacío - Transistores - Chips

• Técnicas

• Métodos

• Testes

• Lento

• Giga negro

• Quality assurance

• Rápido

• Small

•

Validations → Es lo que hace mal

Verifications → El que lo hace bien

Test → Configure System

Setup

→ Simulate

→ Observe

Test Data

¿Fuentes de falla?

¿Dónde seleccionar los parámetros? ¿Qué falla?

¿Qué y cuántos parámetros?

Conditions Java

- Every line

→ Every possible branch

→ Boundary conditions

- Failures

→ Buss

Interfaces - Interface

- Implements

No instanciar Interfaces

Single responsibility principle

Open / close principle

Liskov Substitution principle

Interface Segregation principle

Dependency Inversion principle.

Design problem

S {

- Every class be responsible for a single part of system's functionality
- A class's be encapsulate by the class
- A class's be narrowly aligned.

• Cohesion = localization of designs decisions → Encapsulation

O {

- Class open if it still attributable for extension
- class close for use by other class

• Inheritance • Aggregation • Parameterization

L if S is a serialization of T, then an S object can be used wherever a T object is required

I {

- No client be forced to depend on methods that it does not use.
- The public methods of a component can be grouped by purpose or responsibility as captured in a declaration in interfaces, or abstract classes.

D {

- Organize system into layers
- Components from the abstract layers should no depends on components from the detail layers.
- Abstraction not depends on details
- Implementation details depend on abstractions

- Test → verification \Rightarrow right
- Unit test → every functionality (methods())

Syntax errors \rightarrow int a

Test Cases

Add(x,y)	addend1	addend2	Expect Result	Actual Result
	2.0	3.0	5.0	
	3.2	4.6	7.8	
	0	-24.5	-24.5	
	-23.6	-45.1	-68.1	
	34000.23	60340.25	94340.48	

Class Abstract \rightarrow Funciones con wums
 \rightarrow Atributos

Interfaces \rightarrow Terminar con i
 \rightarrow Declara métodos

Persistence \rightarrow Objects \rightarrow ArrayList
 GUI, DB \rightarrow data \rightarrow ArrayList<objects> \rightarrow Model \rightarrow Controller \rightarrow View

Json connection mongo DB \rightarrow Constructors
 Read from Json to mongo DB

Quality Control \rightarrow Project Quality
 \rightarrow User Acceptance Test plan
 \rightarrow System Test plan

Test plans

- What to test?
- What techniques to use?
- How will the test cases be selected?
- What does testing start?
- When will it finish?

Unit \rightarrow Library
 \rightarrow Reciba un parámetro
 \rightarrow Función retorna algo

Errores de lógica

Program que corre el programa (Automatización)

• Fallos • Corregir errores • Corregir código

DD MM AA

Palabra → solución deseable

Palabra → Design choices by explaining consequences of known solutions

Gloss of book 24 patterns

Creational Patterns

Structural Patterns

Behavior Patterns

Single item

Template

Strategy

• Introduction to Design Patterns

• 2.02. 00 Part

• Design Patterns part 1.

• Design patterns part 2.