(1) Evalution of Software Industry Part -2

Monolathic Application   Microservice
    ┌──────────┐   ┌─────────┐
    │ Single App │   │ Service │
    └──────────┘   └─────────┘
                                  ┌────┴────┐
                              ┌───────┬───────┬───────┐
                              │ Client │ client │ client │
                              └───────┴───────┴───────┘
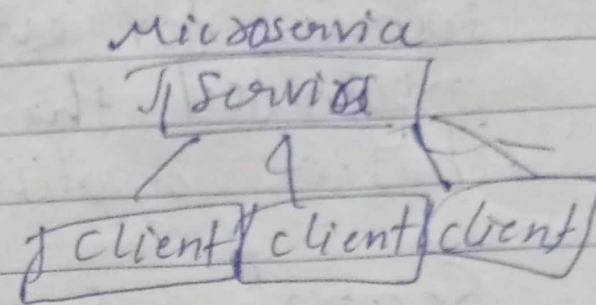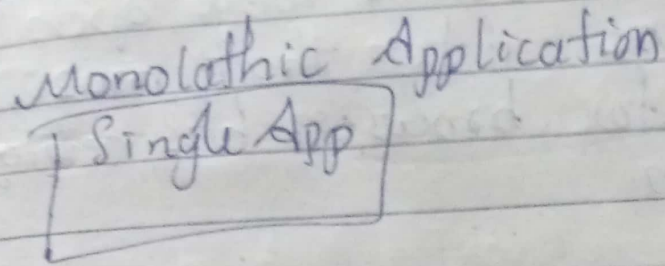
Dot com Bubble
itemname with .com

Y2K :- Year 2 thousand

Year issue
1950 to 1970
    instead of using 4 digits 1990
    developers use 2 digits 90
                              1 - 1 - 90

1996 - 1970
    So many developers start learn coding to solve y2k issues
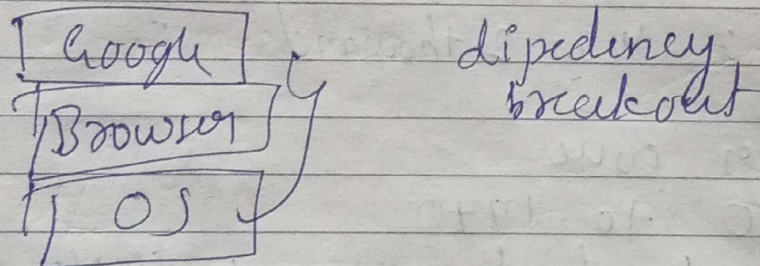
Client - Service Architecture

Browser : Netscape / IE

✦ Microsoft get cased and fine for building and bundled Application with OS without a option for uninstall and user preferred.

✦ Netscape make their source code open source for everyone after that mozilla originated the Firefox browser has netscape based application

Search Engine Era (Google)

○ Search engine are browser based.

```
┌──────────────┐
│    Google     │
├──────────────┤
│   Browser     │
├──────────────┤
│     OS        │
└──────────────┘
```
dependency breakout

○ Google developed their own Browser and make it open source

1. See Browser uses Javascript for spider application because JS is machine independent

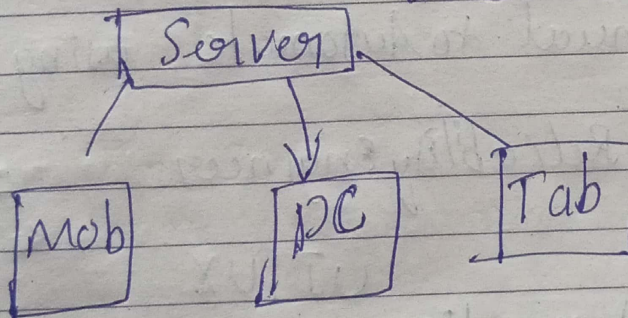Platform as a service } servery
Software as a Service

On prem data goto the data center of provider they called cloud service

Mobile Smart Phone Era
         Mini Computer
one of the widely is Android powered by google

After that Software Developers as also a mobile Application developer

                    B2C evoluzide Rapidly

```
        ┌─────────┐
        │ Server  │
        └─────────┘
       ╱     │      ╲
      ╱      ▼       ╲
 ┌─────┐  ┌─────┐  ┌─────┐
 │ Mob │  │ PC  │  │ Tab │
 └─────┘  └─────┘  └─────┘
```

LLM and GDT (AI Revolutions starts)

Job Roles
→ Developers → 60%   70%
→ QA/Test → 10-20%
→ Project Manager → 10-20%

Quality   Assurance
        ↓   ↓
    Manual   Automation

Examples and Reason why Testing Needed

1) Amazon: Early days they lost dollars
            for allowing negative number

2) NASA: Rocket mismatch of data
            modeling between 2 functions
            this reason route changes and
            rocket crashes

        Dev/ SDET/ Developer

            Dev OPS
        Developer Operations

            Manual to Automate using CI/CD

    SRE: Site Reliability Engineer

~> Security   UI/UX
        optimazition

~> Data Analyst | Data Scientists
~> AI/ML

    Three tier   Architecture) Full
    DB   Backend   Frontend   Stack
    DDB   [Sung]   [web] [mob]