
ASSIGNMENT 01

BUSINESS PROCESS ENGINEERING

3/7/2022

GROUP NUMBER (P-2)

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TASK – 2: GATHERING INFORMATION FROM SOFTWARE COMPANIES

1. LIST OF BUSINESS PROCESSES

Core processes	Support processes
<ol style="list-style-type: none">1. Product Development2. Employee Retention3. Client Hunt4. Employees Recruitment5. Payroll	<ol style="list-style-type: none">1. Requirement Engineering2. Resource administration3. Quality management4. Process management5. Audit process

2. PROCESS STRUCTURES / DEFINITIONS

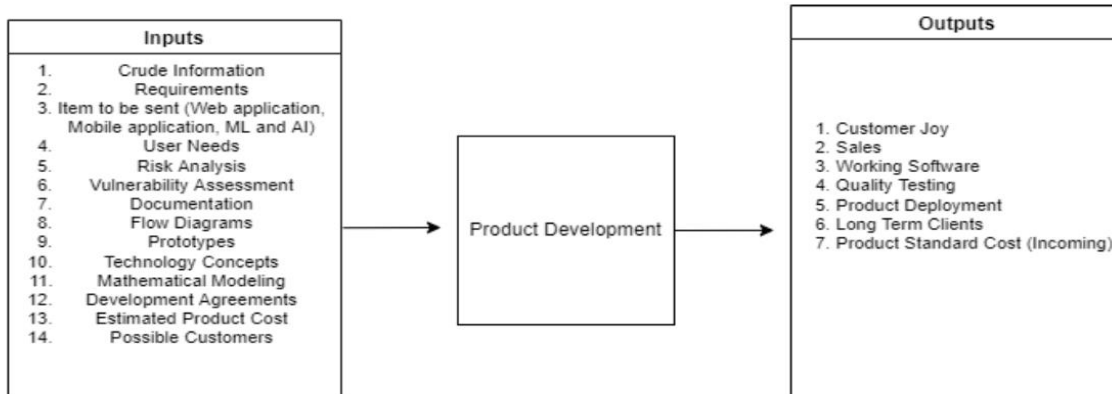
i. PROCESS 1: PRODUCT DEVELOPMENT

a. INPUTS

- Crude Information
- Requirements
- Item to be sent (Web application, Mobile application, ML and AI)
- User Needs
- Risk Analysis
- Vulnerability Assessment
- Documentation
- Flow Diagrams
- Prototypes
- Technology Concepts
- Mathematical Modeling
- Development Agreements
- Estimated Product Cost
- Possible Customers

Output:

- Customer Joy
- Sales
- Working Software
- Quality Testing
- Product Deployment
- Long Term Clients
- Product Standard Cost (Incoming)



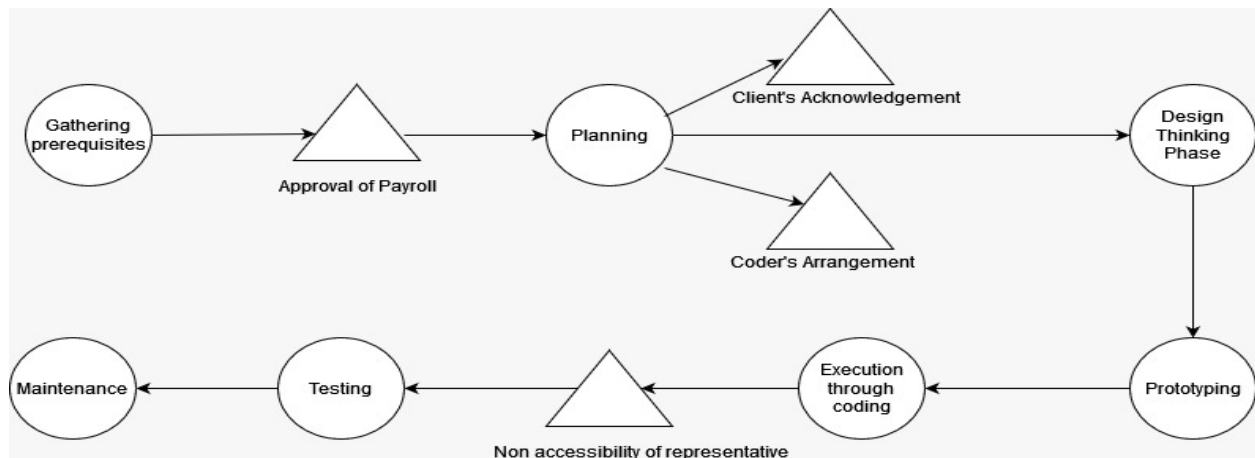
b. FLOW UNITS / JOBS

- Requirement Stack
- Development Models
- Anatomy Plans
- Changed Necessities
- Potential Releases

c. RESOURCES

- HR
- Clients
- Stake Holder
- Users
- Already Existing Products
- Developers Knowledge
- UML Modelers
- Prototypes
- Gadgets utilized for Projects
- Knowledge of employees
- Third party Software's / Outsource

d. NETWORK OF ACTIVITIES AND BUFFER



e. INFORMATION STRUCTURE

Available information	Required information
<ul style="list-style-type: none">➤ Gathered info➤ Methodology (Agile-Scrum)➤ Already Available Similar Products	<ul style="list-style-type: none">➤ Innovation stack➤ UI/UX Plan➤ User's Wants

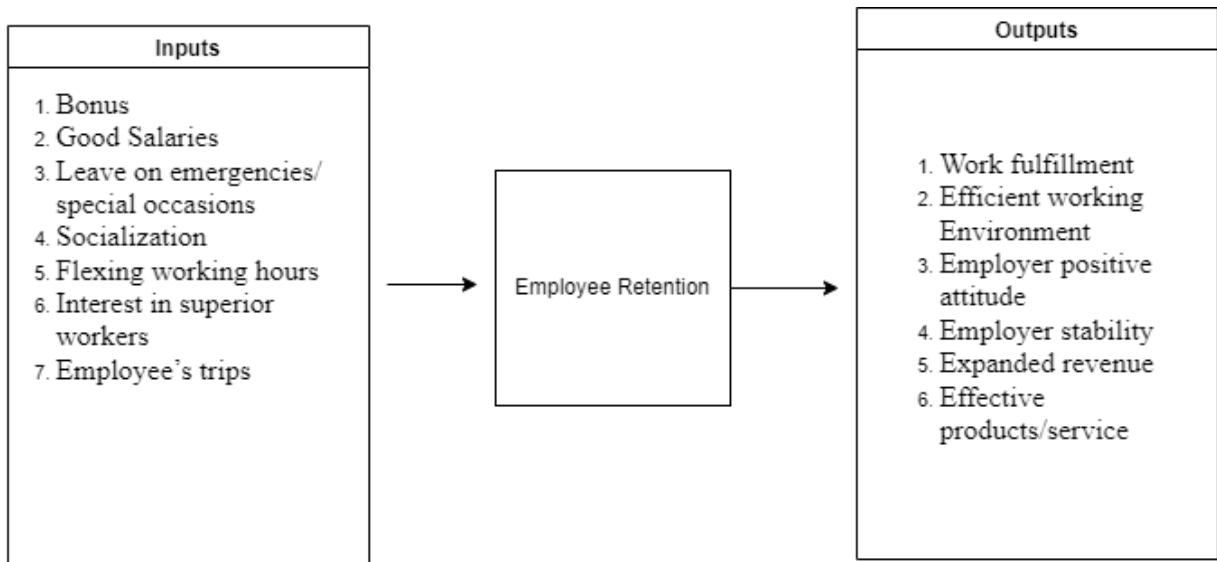
ii. PROCESS 2: EMPLOYEE RETENTION

a. INPUTS

- Bonus
- Good Salaries
- Leave on emergencies/ special occasions
- Socialization
- Flexing working hours
- Interest in superior workers
- Employee's trips

Outputs:

- Work fulfillment
- Efficient working Environment
- Employer positive attitude
- Employer stability
- Expanded revenue
- Effective products/service



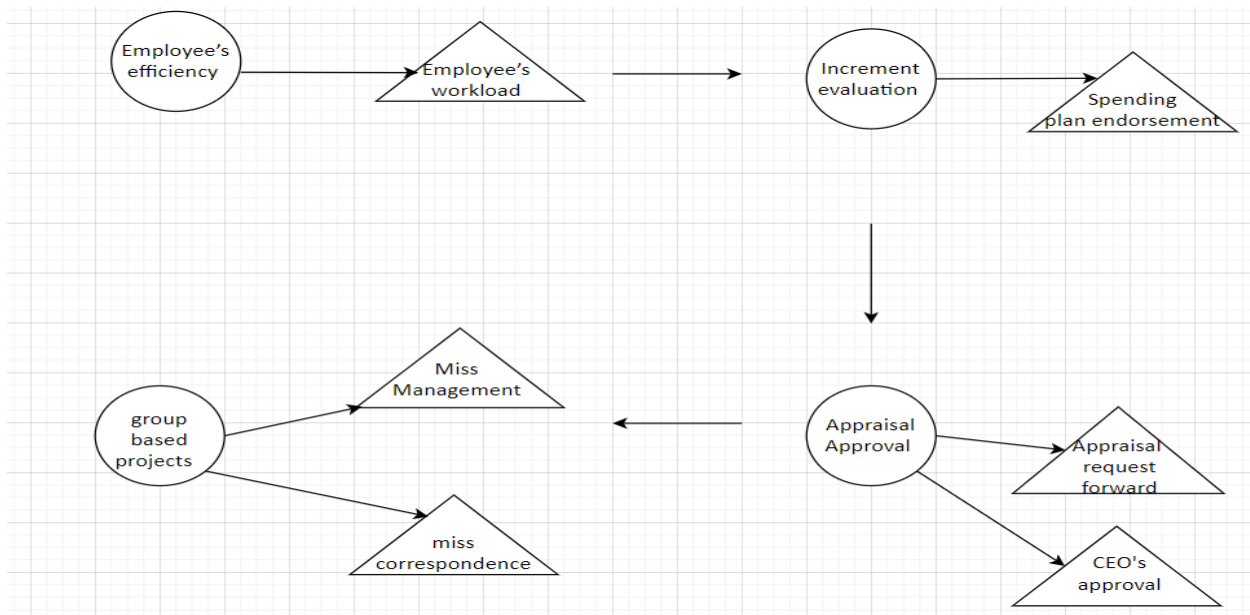
b. FLOW UNITS / JOBS

- Hiring new employee
- Employee promotion
- Employee Salary increment

c. RESOURCES

- Organization's accounts
- Organization's Managers
- Sponsors
- Log sheets

d. NETWORK OF ACTIVITIES AND BUFFER



e. INFORMATION STRUCTURE

Available information	Required information
➤ Number of Employees	➤ Bonus based on performance
➤ Number of trips planned per year	➤ Efficient performance of workers
➤ Number of leaves	➤ Effective working environment
➤ Number of increments in salary	➤ Positive attitude of workers
➤ Percentage of increments in salary	➤ Good food in cafeteria

iii. PROCESS 3: CLIENT HUNT

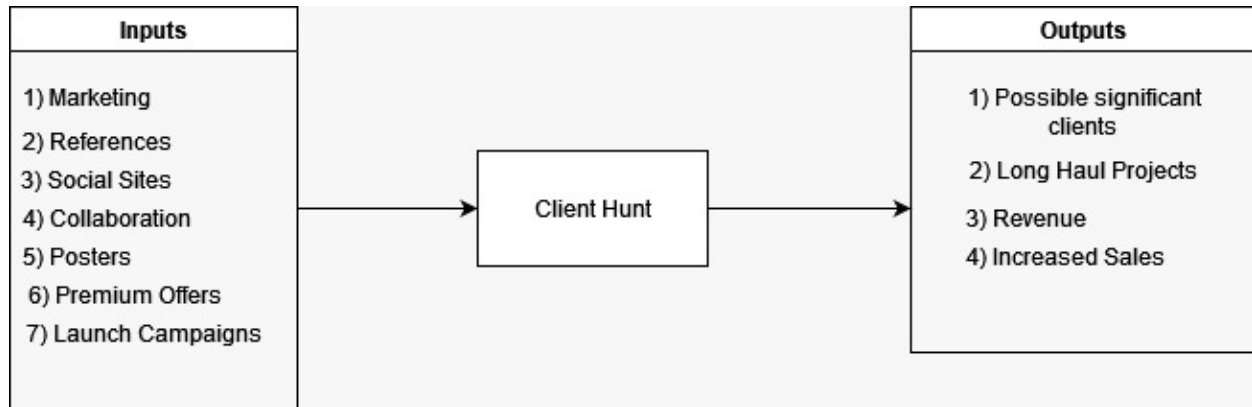
a. INPUTS

- Marketing
- References
- Social sites

- Collaboration
- Posters
- Premium Offerings
- Launch Campaigns

Output:

- Possible significant client
- Long haul projects/financial backers
- Revenue
- Increased



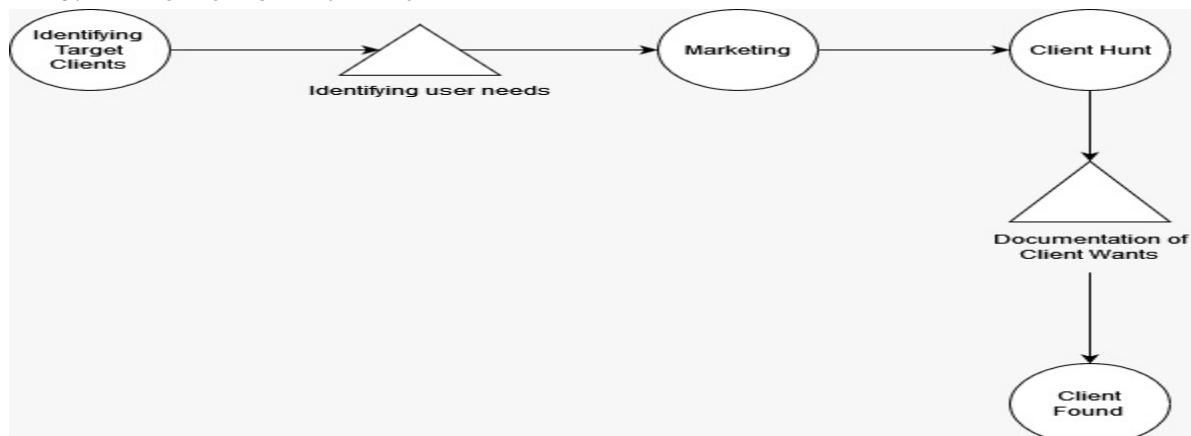
b. FLOW UNITS / JOBS

- Proposals
- Advertising procedures
- Finding your targeted audience
- Keeping up with the clients
- Marketing

c. RESOURCES

- Marketing office
- Advisement
- Already existing survey's data
- PR teams

d. NETWORK OF ACTIVITIES AND BUFFER



e. INFORMATION STRUCTURE

Available information	Required information
<ul style="list-style-type: none"> ➤ Work domain of company ➤ Employees for a project ➤ Target audience ➤ Competitors 	<ul style="list-style-type: none"> ➤ Distinct clients' requirements ➤ Prerequisites of clients ➤ Financial plan ➤ Project Duration

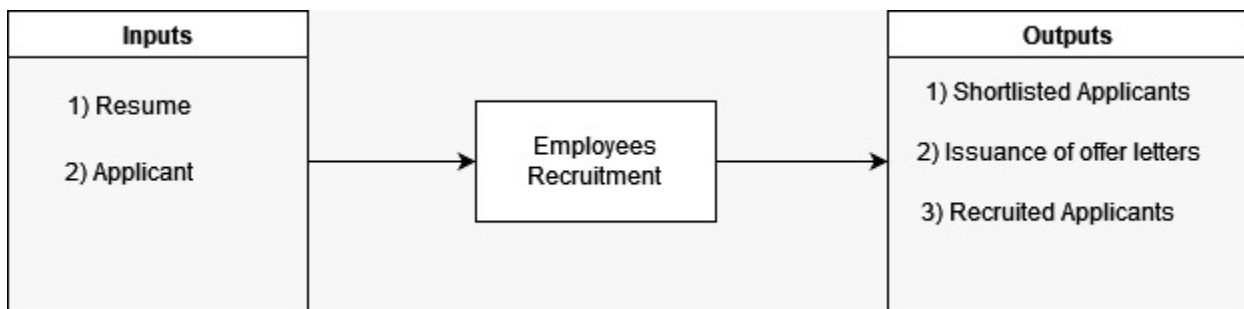
iv. PROCESS 4: EMPLOYEES RECRUITMENT

a. INPUTS AND OUTPUTS

- Resume
- Applicant

Output:

- Shortlisted Applicant
- Issuance of offer letter
- Recruited Applicant



b. FLOW UNITS / JOBS

- Contracts
- Applicants that are being consult

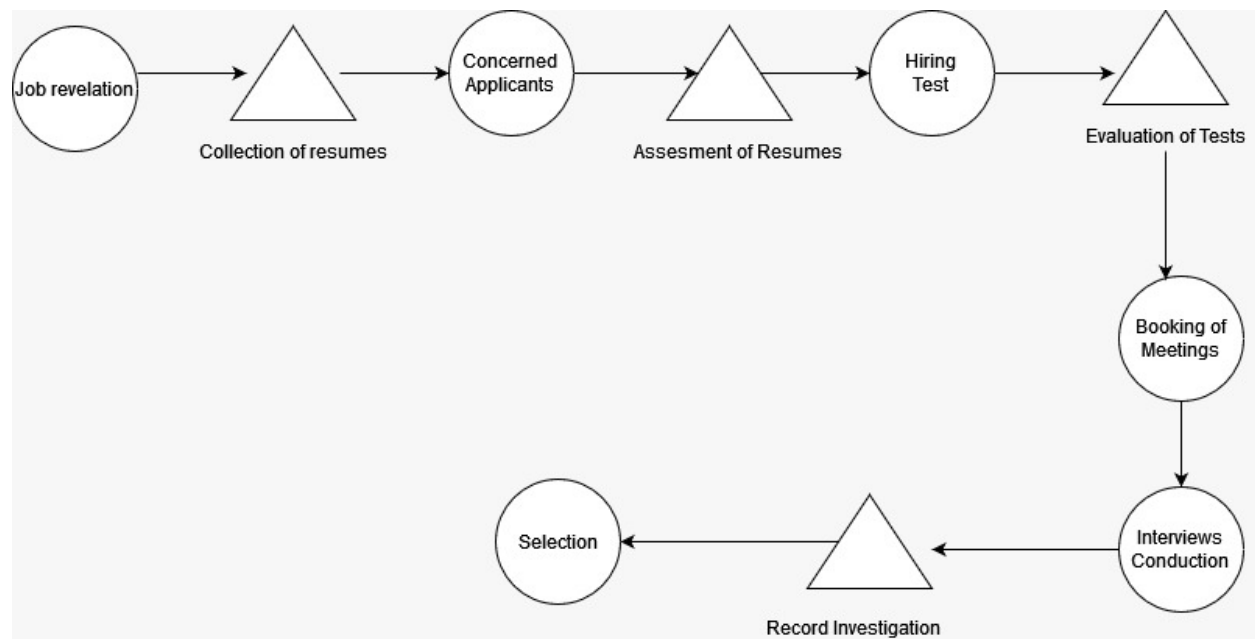
c. RESOURCES

- Vacancy
- Social media/Websites
- HR department
- Interviewers
- Competitors

d. NETWORK OF ACTIVITIES AND BUFFER

- Job revelation
- (Collection of Resumes)
- Concerned Applicants
- (Assessment of resumes)
- Hiring Test
- (Evaluation of Test)
- Booking of meetings

- Interviews conduction
- (Record Investigation)
- Selection



e. INFORMATION STRUCTURE

Available information	Required information
<ul style="list-style-type: none"> ➤ Number of employment opportunities ➤ Complete number of Applicants 	<ul style="list-style-type: none"> ➤ Rejected Applicants ➤ Accepted Applicants ➤ Applicants' expertise ➤ Applicant's experience ➤ Allotment of salary

v. PROCESS 5: PAYROLL

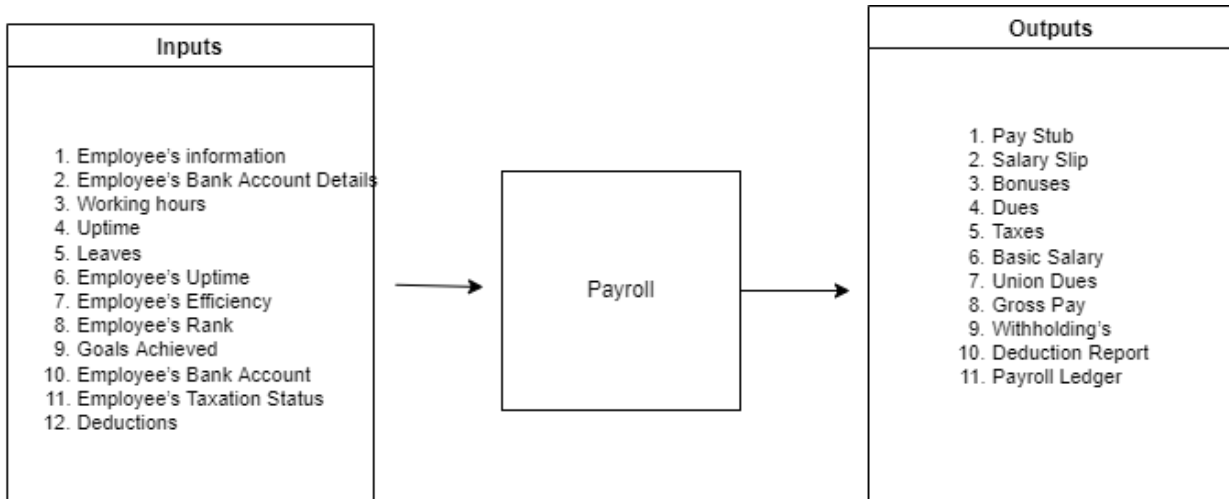
a. INPUTS

- Employee's information
- Employee's Bank Account Details
- Working hours
- Uptime
- Leaves
- Employee's Uptime
- Employee's Efficiency
- Employee's Rank
- Goals Achieved
- Employee's Bank Account
- Employee's Taxation Status
- Deductions

Output:

- Pay Stub

- Salary Slip
- Bonuses
- Dues
- Taxes
- Basic Salary
- Union Dues
- Gross Pay
- Withholding's
- Deduction Report
- Payroll Ledger



b. FLOW UNITS / JOBS

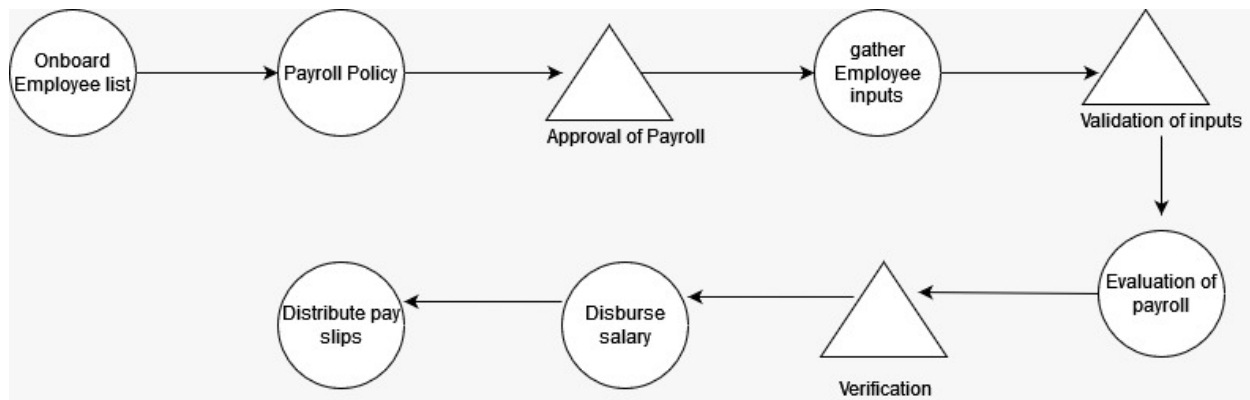
- Workers' Salary information
- Gross Pay Calculation
- Maintaining Ledger
- Send Pay stub over to the Bank Account

c. RESOURCES

- Software for Processing
- Accounts Office
- Banks
- HR Manager

d. NETWORK OF ACTIVITIES AND BUFFER

- Onboard Employee list
- Payroll policy (Approval of payroll)
- Gather employee inputs
- (Validation of inputs)
- Evaluation of payroll
- (Verification)
- Disburse salary
- Distribute pay slips



e. INFORMATION STRUCTURE

Available information	Required information
<ul style="list-style-type: none"> ➤ Workers list ➤ Tax rate ➤ Employees rank 	<ul style="list-style-type: none"> ➤ Wage per hour ➤ Account details ➤ Bonuses and Increments ➤ Uptimes ➤ Leaves

3.

Software product	Business process	Main functions
➤ MS Teams	All online meetings are done through MS Teams.	Helps in workplace chat for meetings.
➤ X Code	It increases the productivity of the IT developers. X code helps in the company for making good IOS products	Used for developing software's for MacOS, IOS , watchOS and TV OS.
➤ My SQL	As it is an open source relational database so company uses it for database purposes.	It is used for making relational database.
➤ Android Studio	Android studio helps this company for making good android apps. The company has on going projects and all employees are using the android studio for development	Helps in producing Google's android based OS.
➤ Visual Studio	The company uses this visual studio for making web based apps. The company also uses ASP.NET for its Projects. So these functionality helps the company business process.	It helps to make programs from beginner to expert level. Mostly web development is done through this software. Web services are also done by this software.
➤ Jira	The company uses agile methodology Jira so Jira helps in managing the projects which are to be done by agile methodology.	Helps in agile product development.

TASK – 3: GATHERING INFORMATION ABOUT SOFTWARE PRODUCTS

1. OPEN-SOURCE ERP SYSTEMS

Sr. No.	ERP system	Web link
1.	Tryton	https://www.tryton.org/
2.	Metasfresh	https://metasfresh.com/en/
3.	OpenBravo	https://www.openbravo.com/
4.	WebErp	https://www.weberp.org/
5.	Adempiere	http://www.adempiere.net/welcome
6.	Apache OFBiz	https://ofbiz.apache.org
7.	odoo	https://www.odoo.com/
8.	Dolibarr	https://www.dolibarr.org/
9.	Metasfresh	https://metasfresh.com/en/
10.	ERPNext	https://erpnext.com/

2. INFORMATION SYSTEMS

Sr. No.	Information system	Main features
1.	Datacor Chempax Software	Centralized inventory and procurement, business intelligence, manufacturing, accounting, customer relationship management.
2.	Arena PLM	Arena Solutions helps innovative electronic high tech and medical device companies create products that change the world.
3.	Ideata Analytics	Data Integration, Data Preparation, Perspective Modeling
4.	AECOM	Business case development , requirement/gap analysis , conceptual/detailed design, data collection to deployment, testing, training and post-implementation support
5.	Decision support System	Information management, data quantification, user interface management and model manipulation.
6.	Drug Information System	Inventory management. E prescribing. Compounding. Medication therapy management. Point of sale and billing solution
7.	ACME Insight	Software for retailers, wholesalers and distributors catering to various sectors like pharmaceuticals, grocery, clothes and garments, automobile spare parts, industrial suppliers, super shop and bazar.
8.	HRIS365	Human Resource Intelligence Software that will streamline and automate HR processes with ease.
9.	Wikipedia	Its purpose to benefit readers by acting as a widely accessible and free encyclopedia.
10.	iGuru	Attendance, framework, Timetable, Tracking