In the name of god







***Producers :***

*Sayyed Hossein Hosseini*

***Supervisor :***

*Dr Mohammad Reza Sharbaf*

***Teacher assistant :***

*Reza Pour Mohammadi*

***Faculty of Computer Engineering, University of Isfahan***

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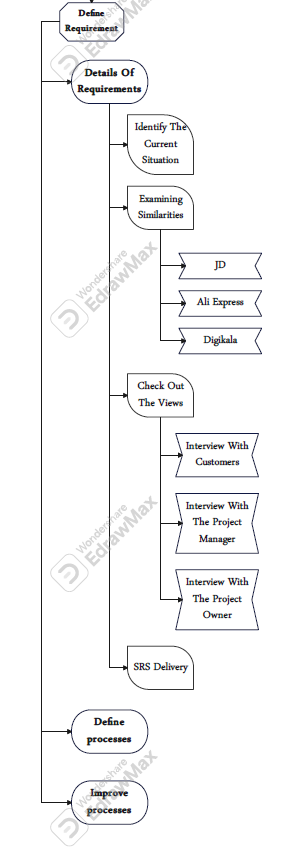
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### Work breakdown structure :



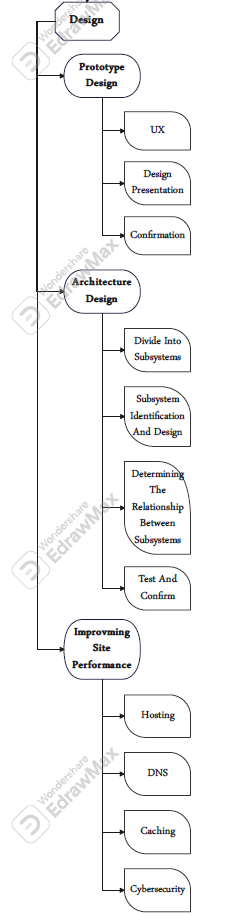
1

### Define Requirement :



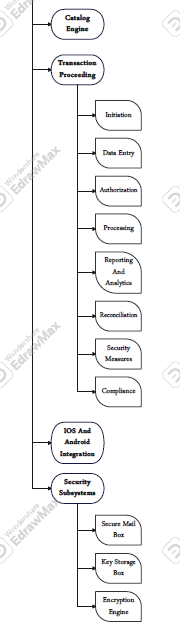
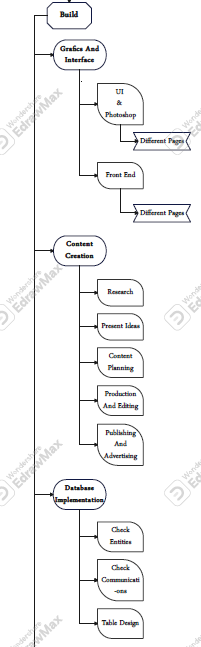
2

### Design :



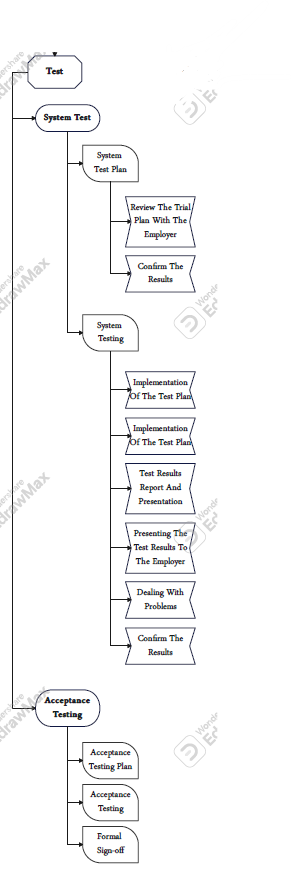
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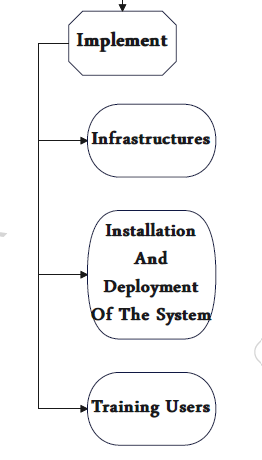
4

### test :



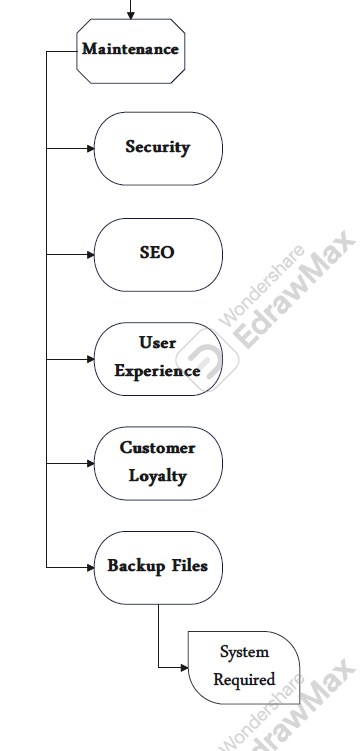
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### implement :



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### maintenance :



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### Estimation Of Functional Points :

* **ILF** **:** 5 Low , 2 Average , 3 High
* **EIF :** 3 Low , 6 Average , 3 High
* **EI :** 6 Low , 4 Average , 5 High
* **EO :** 6 Low , 4 Average , 3 High
* **EQ :** 3 Low , 4 Average , 3 High

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Functional point / Level | Low | Average | High | Sum |
| *Internal Logical Files (ILF)* | 5 \* 7 = 35 | 2 \* 10 = 20 | 3 \* 15 = 45 | 100 |
| *External Interface (EIF)* | 3 \* 5 = 15 | 6 \* 7 = 42 | 3 \* 10 = 30 | 87 |
| *External Input (EI)* | 6 \* 3 = 18 | 4 \* 4 = 16 | 5 \* 6 = 30 | 64 |
| *External Output (EO)* | 6 \* 4 = 24 | 4 \* 5 = 20 | 3 \* 7 = 21 | 65 |
| *External Question (EQ)* | 3 \* 3 = 9 | 4 \* 4 = 16 | 3 \* 6 = 18 | 43 |
| *UAF* | 101 | 114 | 144 | 359 |

* **UAF :** 359
* **TDI :** 50
* **VAF :** ( TDI \* 0.01 ) + 0.65 = ( 50 \* 0.01 ) + 0.65 = 1.15
* **FP :** UAF \* VAF = 359 \* 1.15 = 412.58

The value of functional points is equal to : 412

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### Estimate time and number of labor (Cocomo) :

The average LOC for Python is equal to 48 and the value of function points is equal to 412, so the number of lines of code is :

48 \* 412 = 19776

This project is both organizational and challenging :

* **Effort** : 3.6 \* (KDST) 1.2  = 3.6 \* (19.776) 1.2 = 129.3192
* **Duration** : 2.5 \* (Effort) 0.32 = 2.5 \* (129.3192) 0.32 = 11.8485
* **Persons** : Effort / Duration = 129.3192 / 11.8485 = 10.9

***With this calculation, the number of people needed is approximately equal to 11***

***Good Luck***

***THE END***

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