SOFTWARE PROJECT MANAGEMENT

LAB 3

IPAD RESTAURANT APPLICATION

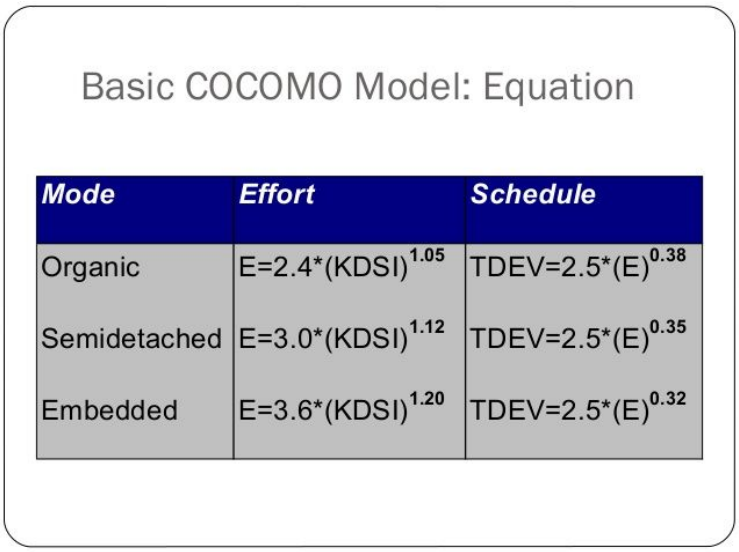
DAMOLA JIMOH(100654285)
IZIEN IREMIREN (100651421)
CHRISTOPHER PHAN (100620028)

https://github.com/SPM-OT/lab-2-group-1

COCOMO Model:

Effort: The amount of labour that is required to complete a task. *Measured in person-months units*.

Schedule: The amount of time required for the completion of the job. *Measured in units of time*



Estimated lines of code for this application= 4000 lines

PM= 2.4*(4)^1.05

= 10.29

Time= 2.5*(4)^.038

= 4.23

Intermediate model:

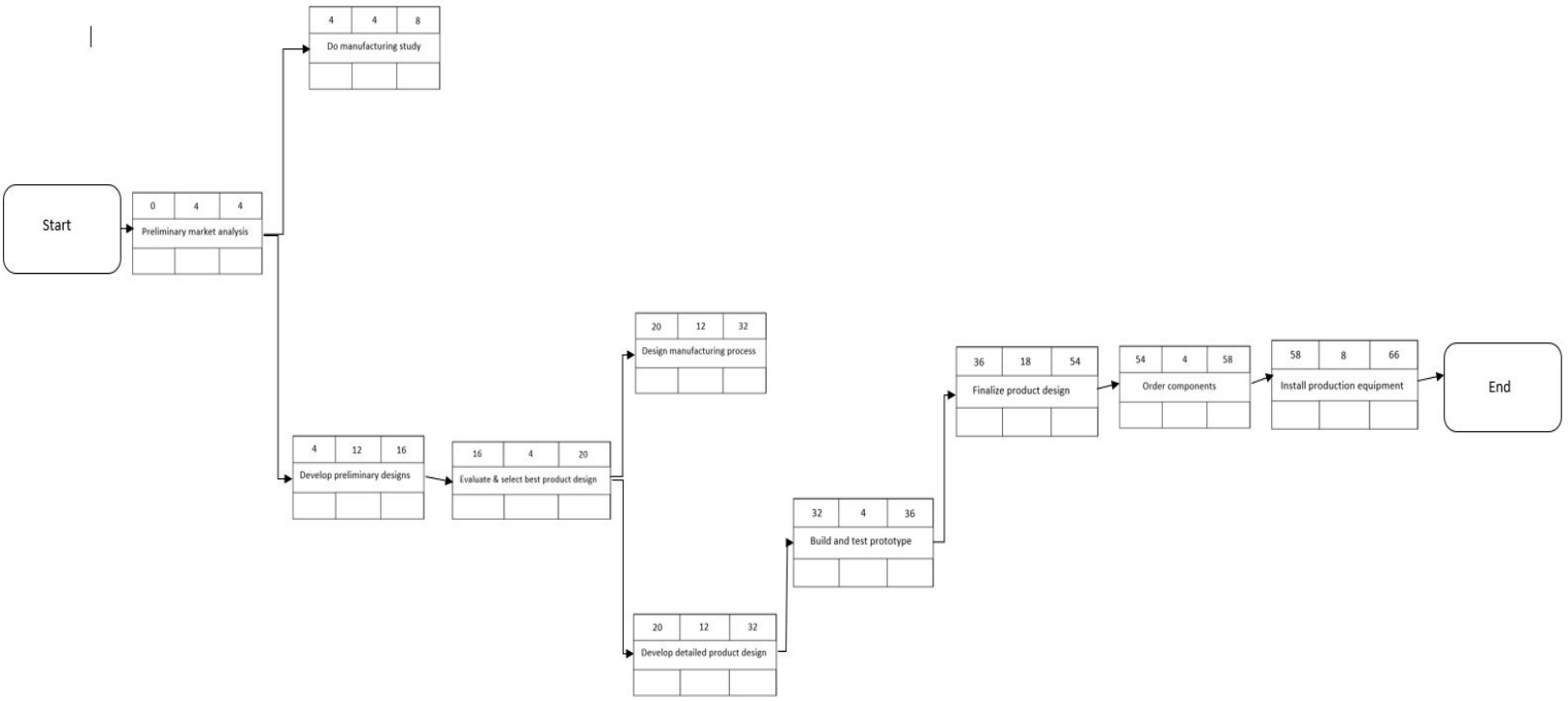
		Rating				
Cost factors	Description	Very low	Low	Nominal	High	Very high
Product						
Rely	Required software reliability	0.75	0.88	1	1.15	1.40
Data	Database size	-	0.94	1	1.08	1.16
Cplx	Product complexity	0.70	0.85	1	1.15	1.30
Computer						
Time	Execution time constraint	-	-	1	1.11	1.30
Stor	Main storage constraint	-	-	1	1.06	1.21
Virt	Virtual machine volatility	-	0.87	1	1.15	1.30
Turn	Computer turnaround time	-	0.87	1	1.07	1.15
Personnel						
Acap	Analyst capability	1.46	1.19	1	0.86	0.71
Aexp	Application experience	1.29	1.13	1	0.91	0.82
Pcap	Programmer capability	1.42	1.17	1	0.86	0.70
Vexp	Virtual machine volatility	1.21	1.10	1	0.90	-
Lexp	Language experience	1.14	1.07	1	0.95	-
Project						
Modp	Modern programming practice	1.24	1.10	1	0.91	0.82
Tool	Software tools	1.24	1.10	1	0.91	0.83
Sced	Development schedule	1.23	1.08	1	1.04	1.10

E= (a(KLOC)^b)*EAF

E= (3.2(4)^1.05))*1.11

=15.23 for time at a high rating

Activity Diagram



Risks:

The risks that are associated with this project are:

- Partnering restaurants and apps companies may fail to meet deadlines. This can be solved by clearly stating expectations and the consequences of them not being met and listen to the reasons for the late deadline so as to find a solution to it together.
- There may be installation problems with later and newer Ipad versions due to the difference in the operating system versions. This can be solved by checking for patterns in the operating system configuration and using this to make the app interoperable.
- There might be lagging in the app due to exponential increase in customers, this could be solved by minimizing the line of codes when building the application.
- There might be loss of information due to connectivity problems between the customers Ipad and the Restaurants Ipad. This can be solved by ensuring the network it is connected to is always open.
- The food quality might be inconsistent , in that case regular anonymous surveys will be done at participating restaurants to check the quality of the food.