FUNCTION POINT METRIC

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Application : A online Meet-Up Application .

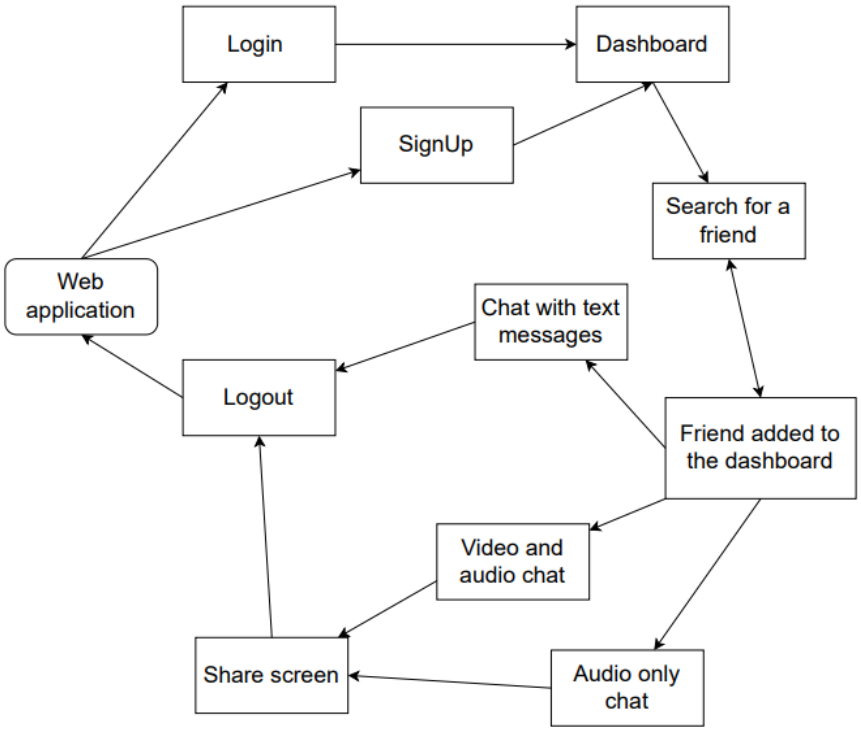
USERS :

- **Customers :**
  - **Customer can registers for an account.**
  - **Customer can log-in to the application.**
  - **Customer can navigates through the chat interface.**
  - **Customer can send and receive text messages.**
  - **Customer can initiate and receives audio and video calls.**
  - **Customer can share their screen while interacting.**

User Registration and Authentication:	**User provides a username, email, and password during registration.** **User enters login credentials for authentication.**	**Authentication success and can later start using application .**
Chat Functionality:	**User types and sends a text message.**	**Display of sent/received text messages.**
Audio and Video	**User initiates an**	**Video and audio feed**

Calls:	**audio call and Video with another user.**	**from the other participant.**
User Profile View :	**User can see profile information and personal information**	**User can see his name and email on the interface .**
Online View :	**User can see who all are online in the application .**	**The online friend would have a green verification mark beside one's name .**

MeetNow website



Estimation using Function Points

Elements of Function Point Estimates

> Overall

‣ Type of Count

‣ Scope of the application

‣ Boundary of the application

> Data Functions

‣ Internal Data Files (Internal Logical File) - ILF

‣ External Data Files (External Interface File) - EIF

> Transaction Functions

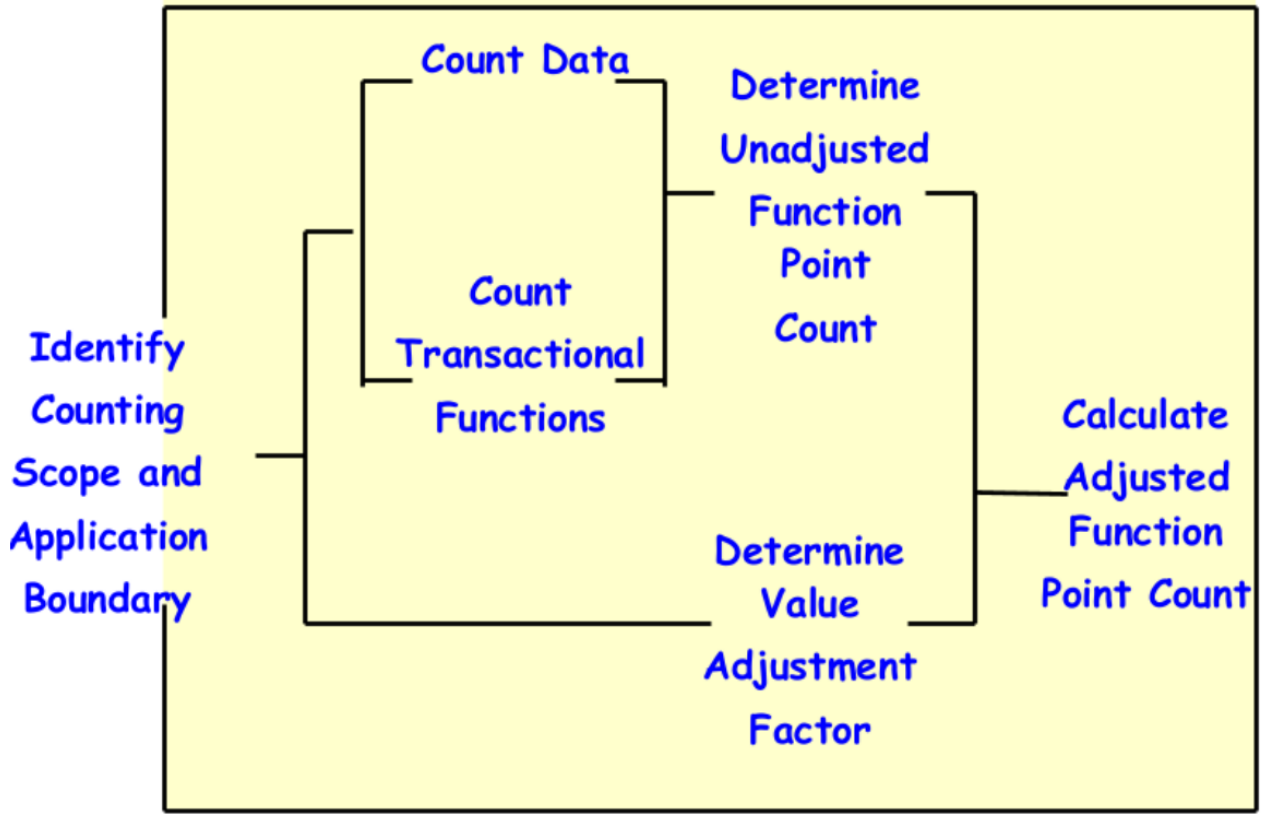
‣ Inputs (External Input) - EI

‣ Outputs (External Output or External Inquiries) - EO/EQ

> General System Characteristics (Performance & Environments factors)

‣ Value Adjustment Factor – VAF

FP Computation Steps



ESTIMATION USING FUNCTION POINTS

Transaction Functions	Fields/File involvement	FTRs	DETs
Schedule meeting(EI)	Meeting Details (Date, Time, Title, Description, Participants, Host, Duration, Meeting ID)	1	7
Join Meeting(EI)	Meeting id,participants name, camera, microphone, share screen chatbox	1	5
User Profile Management (EQ)	Profile Details (Name, Email, Password, Preferences)	2	7
End/Leave Meeting(EI)	End Meeting Option, Confirmation Dialog, Leave Meeting Option	2	4
Manage Meeting Host(EI)	Meeting Control Options (Mute/Unmute, Remove Participants,	1	

	Lock Meeting, etc.)		
Chat During Meeting(EI)	Chat Interface, Participants List, Messages, Send/Receive Options	5	6

Transaction Functions	FTRs	DETs	Complexity	UFP
Schedule meeting(EI)	1	7	Low	5
Join Meeting(EI)	1	7	Low	4
User Profile Management (EQ)	2	7	Average	4
End/Leave Meeting(EI)	2	13	High	4
Manage Meeting Host(EI)	1	10	Low	6
Chat During Meeting(EI)	5	5	Low	3
Total	12	53		32

Unadjusted Function Points

Data functions	RETs	DETs	Complexity	UFP
User Registration	1	9	low	7
Send message	1	3	low	7
Video call	3	13	low	6
Add friend	1	2	low	5
Total				25

ILF/EIF	1-9 DETs	20-50 DETs	51 or more DETs
1	low	Low	average
2 to 5	low	average	high
6 or more	average	high	high

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complexity	Data function type	
	ILF	EIF
low	7	5
average	10	7
high	15	10

GENERAL SYSTEM CHARACTERISTICS

1. Data Communications
2. Distributed Data Processing
3. Performance
4. Heavily Used Configuration
5. Transaction Rate
6. Online Data Entry
7. End-User Efficiency
8. Online Update
9. Complex Processing
10. Reusability
11. Installation Ease
12. Operational Ease
13. Multiple Sites
14, Facilitate Change

Total Degree of Influence (TDI) (Range 0 to 70 -> influence size
by ± 35%)---------->35

Value Adjustment Factor (VAF) = (0.65+ (.01 x TDI)) = (0.65+ (.01
x 35)) = 1

Counting Adjusted Function Points

UFP = UFP (Transaction Fn) + UFP (Data Fn) = 32+25=57

Adjusted Function Point Count = UFP X VAF = 57 x 1 = 57

Efforts for MERN stack = AFP x Productivity = 57 x 10.6 = 604.2 per hours = 76.85 person days

Approx. 77 person days.