



IT-314 Software Engineering

Lab - 3 (Task - 3)

Group - 12

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Task 3:

Develop sprints from the product backlog

- **Specify your sprint details with an estimated timeline for development (use FP or OP for the estimation)**
- **Estimate how many sprints you can develop in your course project**

Function Type	Low	Average	High
External Input (EI)	3	4	6
External Output (EO)	4	5	7
External Inquiry (EQ)	3	4	6
Internal Logic File (ILF)	7	10	15
External Interface File (EIF)	5	7	10

For Example : (For Sprint : 1)

Functionality	Unadjusted FP	Value Adjusted FP	Total FP
Create User	$(1*3) + (1*4) + (1*3) + (1*7) + (1*5) = 22$	0.65	14.3
Authenticate User	$(1*3) + (1*4) + (1*3) + (1*7) + (0*5) = 17$	0.65	11.05
Forgot Password	$(1*3) + (1*4) + (1*3) + (1*7) + (0*5) = 17$	0.65	11.05
Reset User Password	$(2*3) + (1*4) + (1*3) + (1*7) + (1*5) = 25$	0.65	16.25

Sprint 1: User Management & Authentication (1 week)

- **Goal:** Implement core user management and authentication features.
- **User Stories:**
 - ◆ **Create User**
 - Estimate: 14.3 FP
 - ◆ **Authenticate User**
 - Estimate: 11.05 FP
 - ◆ **Forgot Password**

- Estimate: 11.05 FP
- ◆ **Reset User Password**
 - Estimate: 16.25 FP

Total Estimate: 53 FP Sprint Duration: 1 week

Sprint 2: User Profile & Reporting (2 weeks)

→ **Goal:** Develop user profile management and reporting features.

→ **User Stories:**

- ◆ **User Profiles**
 - $[(2*3) + (1*4) + (0*3) + (2*7) + (0*5)] * 0.65 = 15.6$
 - Estimate: 15.6 FP
- ◆ **Report Another User**
 - $[(1*3) + (0*4) + (1*3) + (1*7) + (0*5)] * 0.65 = 8.45$
 - Estimate: 8.45 FP
- ◆ **Profile Privacy Settings**
 - $[(1*3) + (0*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 6.5$
 - Estimate: 6.5 FP
- ◆ **User blocking and unblocking**
 - $[(1*3) + (0*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 6.5$
 - Estimate: 6.5 FP
- ◆ **Suspend/Restore User Accounts**
 - $[(1*3) + (1*4) + (1*3) + (1*7) + (1*5)] * 0.65 = 14.3$
 - Estimate: 14.3 FP

Total Estimate: 52 FP Sprint Duration: 2 weeks

Sprint 3: Real-Time Chat & Media Sharing (4 weeks)

→ **Goal:** Implement real-time chat functionality and media sharing.

→ **User Stories:**

- ◆ **Realtime Chat**
 - $[(1*3) + (1*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 9.1$
 - Estimate: 9.1 FP
- ◆ **Group Chat Room**
 - $[(1*3) + (1*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 9.1$
 - Estimate: 9.1 FP
- ◆ **Media Sharing**
 - $[(1*3) + (1*4) + (0*3) + (1*7) + (1*5)] * 0.65 = 12.35$
 - Estimate: 12.35 FP
- ◆ **Auto-Save Conversations**
 - $[(0*3) + (0*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 4.55$
 - Estimate: 4.55 FP

Total Estimate: 35 FP Sprint Duration: 4 weeks

Sprint 4: Notifications & Spam Prevention (2 weeks)

→ **Goal:** Develop notification systems and spam prevention mechanisms.

→ **User Stories:**

◆ **Notifications Management**

- $[(1*3) + (0*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 6.5$
- Estimate: 6.5 FP

◆ **Send Real-Time Notifications**

- $[(0*3) + (1*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 7.15$
- Estimate: 7.15 FP

◆ **Send Notifications for System Updates (Admin)**

- $[(0*3) + (1*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 7.15$
- Estimate: 7.15 FP

◆ **Spam Detection and Prevention**

- $[(0*3) + (0*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 4.55$
- Estimate: 4.55 FP

Total Estimate: 26 FP Sprint Duration: 2 weeks

Sprint 5: Search & Customization (2 weeks)

→ **Goal:** Implement search functionality and customization options.

→ **User Stories:**

◆ **View chat history**

- $[(0*3) + (0*4) + (1*3) + (0*7) + (0*5)] * 0.65 = 1.95$
- Estimate: 1.95 FP

◆ **Search chat**

- $[(0*3) + (0*4) + (1*3) + (1*7) + (0*5)] * 0.65 = 6.5$
- Estimate: 6.5 FP

◆ **Read receipts**

- $[(0*3) + (1*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 7.15$
- Estimate: 7.15 FP

◆ **Customization**

- $[(1*3) + (1*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 9.1$
- Estimate: 9.1 FP

◆ **Delete User**

- $[(1*3) + (1*4) + (0*3) + (1*7) + (0*5)] * 0.65 = 9.1$
- Estimate: 9.1 FP

Total Estimate: 34 FP Sprint Duration: 2 weeks

Sprint 6: Status (1 week)

→ **Goal:** Develop status sharing feature and address remaining tasks.

→ **User Stories:**

◆ **Status**

- $[(1*3) + (1*4) + (0*3) + (1*7) + (1*5)] * 0.65 = 12.35$
- Estimate: 12.35 FP

Total Estimate: 13 FP Sprint Duration: 1 week

Total Project Duration

- **Number of Sprints:** 6
- **Total Estimated Time:** 11-12 weeks