

IT-314
Software Engineering

Lab – 3 (Task - 3)
Group - 7

Given by: -
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COMMUNICATION TECHNOLOGY**

Function Type	Low	Average	High
EI	x 3	x 4	x 6
EO	x 4	x 5	x 7
EQ	x 3	x 4	x 6
ILF	x 7	x 10	x 15
EIF	x 5	x 7	x 10

Example:

Sign up for student	Component type	Description	Complexity	FP
Sign up	EI	Student inputs name, email, phone number	Low	3
OTP Verification	EO	OTP is generated and sent to email/phone	Low	4
OTP Entry and verification	EQ	Student enters OTP for verification	Low	3
Total(for this)				10

- **Sprint 1: User Registration & Authentication**

Goal: Implement core user registration and authentication features.

For Sprint 1:

Functionality	Component ($\Sigma \text{count} * \text{FPWeight}$)	Value Adjustment	Total FP
Sign up for student	$(1*3) + (1*4) + (1*3) + (0*7) + (0*5) = 10$	0.65	6.5
Login for Student	$(1*3) + (1*4) + (2*3) + (0*7) + (0*5) = 13$	0.65	8.45
Reset Password	$(1*3) + (1*4) + (0*3) + (0*7) + (0*5) = 7$	0.65	4.55
Login for admin	$(1*3) + (1*4) + (0*3) + (0*7) + (0*5) = 7$	0.65	4.55
Total			24.5

User Stories:

- **Sign Up for Unregistered Students**

- *Estimate: 6.5 FP*

- **Login for Registered Students**

- *Estimate: 8.45 FP*

- **Login for Admin**

- Estimate: 4.55 FP*

- **Forgot Password**

- Estimate: 4.55 FP*

→ Total Estimate: 24.5 FP

→ Sprint Duration: 1-1.5 weeks

- **Sprint 2: Scholarship Viewing & Application**

Goal: Develop features for viewing and applying for scholarship

For Sprint 2:

User story	Component ($\Sigma \text{count} * \text{FPWeight}$)	Value Adjusted FP	TotalFP
View and Apply for Scholarships	$(1 * 3) + (1 * 4) + (1 * 3) + (1 * 7) + (0 * 5) = 17$	0.65	11.05
Upload Documents	$(1 * 4) + (1 * 5) + (1 * 4) + (1 * 10) + (0 * 7) = 23$	0.65	14.95
View Scholarship Details	$(1 * 3) + (1 * 4) + (1 * 3) + (1 * 7) + (0 * 5) = 17$	0.65	11.05
Edit Application	$(1 * 4) + (1 * 5) + (1 * 4) + (1 * 10) + (0 * 7) = 23$	0.65	14.95
Total			52

User Stories:

- **View and Apply for Scholarships**

- *Estimate: 11.05 FP*

- **Upload Documents**

- *Estimate: 14.95 FP*

- **View Scholarship Details**

- *Estimate: 11.05 FP*

- **Edit Application**

- *Estimate: 14.95 FP*

→ **Total Estimate: 52 FP**

→ **Sprint Duration: 2 weeks**

- **Sprint 3: Application Management & Status Tracking**

Goal: Implement features for managing applications and tracking status.

For Sprint 3:

Functionality	Component ($\sum \text{count} * \text{FPWeight}$)	Value Adjustment	Total FP
Check Application Status	$(0*3) + (1*4) + (1*3) + (1*7) + (0*5) = 14$	0.65	9.1
View Application History	$(0*3) + (1*4) + (1*3) + (1*7) + (0*5) = 14$	0.65	9.1
Edit Application	$(1*4) + (1*5) + (1*4) + (1*10) + (0*7) = 23$	0.65	14.95
View Scholarship Details	$(0*3) + (1*4) + (1*3) + (1*7) + (0*5) = 14$	0.65	9.1
Receive Notifications	$(0*3) + (1*4) + (1*3) + (1*7) + (0*5) = 14$	0.65	9.1
Total			51.35

User Stories:

- **Check Application Status**

- *Estimate: 9.1 FP*

- **View Application History**

- *Estimate: 9.1 FP*

- **Edit Application**

- *Estimate: 14.95 FP*

- **View Scholarship Details**

- *Estimate:* 9.1 FP

- **Receive Notifications**

- *Estimate:* 9.1 FP

→ **Total Estimate: 51.35 FP**

→ **Sprint Duration: 2 weeks**

- **Sprint 4: Admin Scholarship Management**

Goal: Implement scholarship management features for admins.

For Sprint 4:

User story	Component ($\Sigma \text{count} * \text{FPWeight}$)	Value Adjusted FP	TotalFP
Admin Add Scholarship	$(1 * 3) + (1 * 4) + (0 * 3) + (1 * 7) + (0 * 5) = 14$	0.65	9.1
Admin Update Scholarship	$(1 * 3) + (1 * 4) + (1 * 3) + (1 * 7) + (0 * 5) = 17$	0.65	11.05
Admin Remove Scholarship	$(1 * 3) + (1 * 4) + (0 * 3) + (1 * 7) + (0 * 5) = 14$	0.65	9.1
Update Status of Scholarship	$(1 * 3) + (1 * 4) + (1 * 3) + (0 * 7) + (0 * 5) = 10$	0.65	6.5
Total			45.1

User Stories:

- **Admin Add Scholarship**
 - *Estimate:* 9.1 FP
- **Admin Update Scholarship**
 - *Estimate:* 11.05 FP
- **Admin Remove Scholarship**
 - *Estimate:* 9.1 FP
- **Update Status of Scholarship**
 - *Estimate:* 11.05 FP

→ **Total Estimate:** 45.1 FP

→ **Sprint Duration:** 1.5-2 weeks

- **Sprint 5: Admin Dashboard & Application Review**

Goal: Develop an admin dashboard and features for reviewing applications.

For Sprint 5:

Functionality	Component ($\Sigma \text{count} * \text{FPWeight}$)	Value Adjustment	Total FP
Admin Dashboard	$(1 * 3) + (1 * 4) + (1 * 3) + (1 * 7) + (0 * 5) = 17$	0.65	11.05
Application Review by Admin	$(1 * 4) + (1 * 5) + (2 * 4) + (1 * 10) + (0 * 7) = 27$	0.65	17.55
Manage FAQ Section	$(1 * 3) + (1 * 4) + (0 * 3) + (1 * 7) + (0 * 5) = 14$	0.65	9.1
Total			37.7

User Stories:

- **Admin Dashboard**

- *Estimate:* 11.05 FP

- **Application Review by Admin**

- *Estimate:* 17.55 FP

- **Admin Manage FAQ Section**

- *Estimate:* 9.1 FP

→ **Total Estimate:** 37.7 FP

→ **Sprint Duration:** 1.5-2 weeks

- **Sprint 6: Profile Management, User Management, & Security**

Goal: Implement profile management, user management, and security features.

For Sprint 6:

User story	UFP	Value Adjusted FP	TotalFP
Student Profile Management	$(1*4)+(1*4)+(1*4)+(1*10)+(0*7) = 22$	0.65	14.3
Admin User Management	$(2*4)+(1*4)+(1*4)+(1*10)+(1*7) = 33$	0.65	21.45
Secure User Sessions	$(1*4)+(1*4)+(0*4)+(1*10)+(0*7) = 18$	0.65	11.7
View FAQ Section	$(0*3) + (1*4) + (0*3) + (1*7) + (0*5) = 11$	0.65	7.15
Total(for this)			54.6

User Stories:

- **Student Profile Management**

- *Estimate:* 14.3 FP

- **Admin User Management**

- *Estimate:* 21.45 FP

- **Secure User Sessions**

- *Estimate:* 11.7 FP

View FAQ Section

- *Estimate:* 7.15 FP

→Total Estimate: 54.6 FP

→ Sprint Duration: 2 weeks

- **Total Project Duration:-**

- ❖ **Number of Sprints: 6**

- ❖ **Total Estimated Time: 10-12 weeks**

Thank You