IT314: SOFTWARE ENGINEERING
PROJECT GROUP: 15

TOPIC: NEWS AGGREGATOR
Sprints from Product Backlog

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IT314-Software Engineering

Sprints & Function point estimation

Sprint 1: User Registration & Basic Profile Management

- Unadjusted Function Point:

Type	Weight	Value	Total
Internal Logical File (ILF)	10	1	10
External Interface File (EIF)	5	1	5
External Input (EI)	6	2	12
External Output (EO)	4	2	8
External Query (EQ)	3	1	3
Unadjusted Function Points (UFP)			**38**

- Complexity Adjustment Factors:

Factor	Value
Backup and Recovery	2
Data Communication	2

Distributed Processing Functions	1
Is Performance Critical?	2
Existing Operating Environment	2
On-line Data Entry	2
Input Transaction Built Over Multiple Screens	1
Master Files Updated On-line	2
Complexity of Inputs, Outputs, Files, Inquiries	2
Complexity of Processing	2
Code Design for Reuse	1
Conversion/Installation Included	1
Multiple Installations	0
Application Designed to Facilitate Change	2

➢ Processing Complexity (PC): 22

➢ Adjusted Processing Complexity (PCA): $0.65 + (0.01 \times 22) = 0.87$

➢ Adjusted Function Points (AFP):   38 × 0.87 = 33

Sprint 2: Article Viewing & Basic Interactions

- Unadjusted Function Point:

Type	Weight	Value	Total
Internal Logical File (ILF)	8	2	16
External Interface File (EIF)	4	1	4
External Input (EI)	5	2	10
External Output (EO)	5	2	10
External Query (EQ)	3	1	3
Unadjusted Function Points (UFP)			**43**

- Complexity Adjustment Factors:

Factor	Value
Backup and Recovery	1
Data Communication	2
Distributed Processing Functions	1
Is Performance Critical?	2
Existing Operating Environment	2
On-line Data Entry	2
Input Transaction Built Over Multiple Screens	1
Master Files Updated On-line	1
Complexity of Inputs, Outputs, Files, Inquiries	2
Complexity of Processing	2

Code Design for Reuse	1
Conversion/Installation Included	1
Multiple Installations	0
Application Designed to Facilitate Change	1

➢ Processing Complexity (PC): 17

➢ Adjusted Processing Complexity (PCA): 0.65 + (0.01 × 17) = 0.82

➢ Adjusted Function Points (AFP): 43 × 0.82 = 35

Sprint 3: News Provider Management

- Unadjusted Function Point:

Type	Weight	Value	Total
Internal Logical File (ILF)	12	2	24

External Interface File (EIF)	6	2	12
External Input (EI)	8	2	16
External Output (EO)	6	2	12
External Query (EQ)	4	1	4
Unadjusted Function Points (UFP)			**68**

- Complexity Adjustment Factors:

Factor	Value
Backup and Recovery	2
Data Communication	3
Distributed Processing Functions	2
Is Performance Critical?	3

Existing Operating Environment	2
On-line Data Entry	3
Input Transaction Built Over Multiple Screens	2
Master Files Updated On-line	2
Complexity of Inputs, Outputs, Files, Inquiries	3
Complexity of Processing	3
Code Design for Reuse	2
Conversion/Installation Included	2
Multiple Installations	0
Application Designed to Facilitate Change	2

➢ Processing Complexity (PC): 34

➢ Adjusted Processing Complexity (PCA): $0.65 + (0.01 \times 34) = 0.99$

➢ Adjusted Function Points (AFP): $68 \times 0.99 = 67$

Sprint 4: Reader Profile Management

- Unadjusted Function Point:

Type	Weight	Value	Total
Internal Logical File (ILF)	10	3	30
External Interface File (EIF)	5	2	10
External Input (EI)	7	3	21
External Output (EO)	7	3	21
External Query (EQ)	5	2	10
Unadjusted Function Points (UFP)			**92**

- Complexity Adjustment Factors:

Factor	Value
Backup and Recovery	2

Data Communication	3
Distributed Processing Functions	2
Is Performance Critical?	3
Existing Operating Environment	3
On-line Data Entry	3
Input Transaction Built Over Multiple Screens	2
Master Files Updated On-line	2
Complexity of Inputs, Outputs, Files, Inquiries	3
Complexity of Processing	3
Code Design for Reuse	2
Conversion/Installation Included	2
Multiple Installations	1
Application Designed to Facilitate Change	3

➢ Processing Complexity (PC): 35

➢ Adjusted Processing Complexity (PCA): 0.65 + (0.01 × 35) = 1.00

➢ Adjusted Function Points (AFP): 92 × 1.00 = 92

Sprint 5: Admin Controls & Analytics

- Unadjusted Function Point:

Type	Weight	Value	Total
Internal Logical File (ILF)	12	3	36
External Interface File (EIF)	6	2	12
External Input (EI)	9	3	27
External Output (EO)	8	3	24
External Query (EQ)	6	2	12
Unadjusted Function Points (UFP)			**111**

- Complexity Adjustment Factors:

Factor	Value
Backup and Recovery	3
Data Communication	3
Distributed Processing Functions	3
Is Performance Critical?	4
Existing Operating Environment	3
On-line Data Entry	3
Input Transaction Built Over Multiple Screens	2
Master Files Updated On-line	3
Complexity of Inputs, Outputs, Files, Inquiries	4
Complexity of Processing	3
Code Design for Reuse	2

Conversion/Installation Included	2
Multiple Installations	1
Application Designed to Facilitate Change	2

➤ Processing Complexity (PC): 31

➤ Adjusted Processing Complexity (PCA): $0.65 + (0.01 \times 31) = 0.96$

➤ Adjusted Function Points (AFP): $111 \times 0.96 = 106$

➡ Total sprints - **5**

➡ Total Estimated Time for the Project: **10 weeks**