

Pretend that the Career Services office at your university wants to develop a system that collects student resumes and makes them available to students and recruiters over the web. Students should be able to input their resume information into a standard resume template. The information is then presented in a resume format, and it also is placed in a database that can be queried using an online search form. You have been placed in charge of the project. Develop a plan for estimating the project (briefly describe your inputs, outputs, etc.). How long do you think it would take for you and three other students to complete the project?

Inputs would be the fields of the Resume form, queries would be all major form headings, and outputs would be a list of matching resumes and the full resume.

## **Inputs**

1. Main Resume Template Page (Data Set 2)
  - a. Campus Student Id
  - b. Name
  - c. Address 1
  - d. Address 2
  - e. City
  - f. State
  - g. Zip Code
  - h. Phone
  - i. Cell Phone
  - j. Fax Number
  - k. E-Mail
  - l. Objective
  - m. Summary Of Experience
    - i. First Bullet
    - ii. Second Bullet
    - iii. Third Bullet
    - iv. Fourth Bullet
    - v. Fifth Bullet
  - n. Technical Expertise:
    - i. Field 1
    - ii. Field 2
    - iii. Field 3
    - iv. Field 4
    - v. Field 5
    - vi. Field 6
  - o. Education
    - i. High School
      1. Address
      2. Graduate
    - ii. College
      1. Address
      2. Graduate
    - iii. College

- 1. Address
    - 2. Graduate
  - iv. College
    - 1. Address
    - 2. Graduate
  - v. College
    - 1. Address
    - 2. Graduate
- p. Experience:
  - i. Job 1
  - ii. Job 2
  - iii. Job 3
  - iv. Job 4
  - v. Job 5
  - vi. Job 6
- q. Activities
  - i. 1
  - ii. 2
  - iii. 3
  - iv. 4
  - v. 5
  - vi. 6

**Query: search by**

- 1. Name
- 2. City
- 3. State
- 4. Zip Code
- 5. Technical Expertise
- 6. Education
- 7. Experience

**Output**

- 1. Introduction Home Page - University logo with hyperlink to entry/edit screen
- 2. List of instructions and suggestions on how to fill out resume form and sample document
- 3. Check Formatted Resume with hyperlink to entry/edit screen
- 4. Summary List of Resumes that match Query by Name
- 5. Complete Resumes
- 6. Help Screen

**Files:**

- 1. resume database file

Function Point Estimation:

Description	Complexity			Total
	Low	Medium	High	
Inputs	x 3	x 4	1 x 6	6
Outputs	4 x 4	2 x 5	x 7	26
Queries	6 x 3	x 4	1 x 6	24
Files	x 7	x 10	1 x 15	15
Program Interfaces	x 5	x 7	x 10	—

Total Unadjusted Function Points (TUFP): 71

(0=no effect on processing complexity; 5=great effect on processing complexity)

	0-5
Data communications	1
Heavily use configuration	1
Transaction rate	1
End-user efficiency	1
Complex processing	1
Installation ease	1
Multiple sites	0
Performance	3
Distributed functions	0
On-line data entry	2
On-line update	1
Reusability	1
Operational ease	1
Extensibility	0

Processing Complexity (PC): 14

Adjusted Processing Complexity (PCA) =  $0.65 + (0.01 * \underline{14})$

Total Adjusted Function Points (TAFP):  $\underline{0.79} * \underline{71} = 56.09$

Choose to use JAVA and HTML to do the implementation

JAVA: 80%, HTML: 20%

LOC =  $55 * 80\% * 56 + 15 * 20\% * 56 = 2632$

Effort in person Month (EPM) = 1.4 \* LOC in thousands = 1.4\*2.6 = 3.64

Schedule Time (Month) = 3.0\* EPM<sup>1/3</sup> = 3.0\* 1.538 = 4.6 (month)