**Labor, Cost & Schedule Document**

**Instructor-Course Assignment Application**

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# **Introduction & Summary** – Kiana

The Instructor-Course Assignment Application is a web-based application that allows University Program Coordinators to assign Instructors to the Courses that they are teaching for a certain school-year semester. It also allows the user to export a complete document of all Instructor-Course assignments as an XML file. The total cost of labor is projected to be $308,993. The total cost of materials is projected to be $3,100. The total cost is projected to be $312,993 and the project is scheduled to be completed on April 5, 2019.

# **Labor**

## Labor Categories – Kiana + David

|  |  |
| --- | --- |
| **Project Labor Categories** | |
| **Labor Category** | **Justification** |
| Design Engineer | A Design Engineer is needed to develop the theoretical and detailed design of the system to ensure that the product functions and performs based on the system’s requirements. |
| Test Engineer | A Test Engineer is needed to test the system to ensure that the product meets the system’s requirements. |
| Software Engineer | A Software Engineer is needed to develop the database, server application, and design the interface protocols of the project |
| User Experience Designer | A User Experience Designer is needed to conduct user research in order to develop the user interface and user flows. |
| Technical Writer | A Technical Writer is needed to develop the user guides that will communicate the needed information to use and administer the system. |
| Technician | Since our system is purely software, a Technician is not needed. |
| Fabricator / Assembler | Since our system is purely software, a Fabricator / Assembler is not needed. |
| Drafting / CAD | Since our system is purely software, a Drafting / CAD design is not needed. |
| Marketing Analyst | If we were to put our product on the market, a Marketing Analyst would be needed to research and gather data to help us sell our product. |
| System Administrator | An Administer is needed to setup, maintain, and manage the hardware and firmware implementation of the project |
| Management / Supervision | An Adjunct Faculty serves as the course instructor of this project and provides supervision of the project |
| Consulting | A Professor of Practice at Texas State University performs course scheduling tasks and will provide consultation in the design process of the project |

## Labor Rates – Kiana

|  |  |  |
| --- | --- | --- |
| **Labor Categories and Burdened Hourly Costs** | | |
| **Labor Category** | **Burdened Hourly Cost** | **Justification** |
| Design Engineer | $110.74 | average salary for job in Austin, TX, converted into hourly rate, then doubled |
| Test Engineer | $84.04 | average salary for job in Austin, TX, converted into hourly rate, then doubled |
| Software Engineer | $94.12 | average salary for job in Austin, TX, converted into hourly rate, then doubled |
| User Experience Designer | $80.42 | average salary for job in Austin, TX, converted into hourly rate, then doubled |
| Technical Writer | $57.14 | average salary for job in Austin, TX, converted into hourly rate, then doubled |
| Marketing Analyst | $67.69 | average salary for job in Austin, TX, converted into hourly rate, then doubled |
| System Administrator | $73.78 | average salary for job in Austin, TX, converted into hourly rate, then doubled |
| Management / Supervision | $41.35 | average salary for adjunct faculty at Texas State University, converted into hourly rate, then doubled |
| Consulting | $112.97 | median salary for Professor of Practice at Texas State University, converted into hourly rate, then doubled |

## Total Cost of Labor – Kiana

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **LABOR ESTIMATE** | | | | | | | | | | |
|  | **Design Engineer** | **Test Engineer** | **Software Engineer** | **User Experience Designer** | **Technical Writer** | **Marketing Analyst** | **System Administrator** | **Supervisor** | **Consultant** | **TOTAL** |
| Burdened Hourly Rate | $110.74 | $84.04 | $94.12 | $80.42 | $57.14 | $67.69 | $73.78 | $41.35 | $112.97 |  |
| **Task** | **Hours Required** | | | | | | | | |  |
| Statement of Work | - | - | - | - | 80 | - | - | 20 | 20 | **120** |
| Theoretical Design | 80 | 80 | 80 | 80 | 20 | - | - | 20 | 20 | **380** |
| System Platform (Selection & Installation) | 120 | - | 120 | - | 20 | - | 120 | 30 | 30 | **440** |
| User Experience (Research & Design) | 120 | - | - | 120 | 20 | - | - | 30 | 30 | **320** |
| Functional Specification | - | - | - | - | 120 | - | - | 30 | 30 | **180** |
| Test Plan | 80 | 120 | 80 | 80 | 20 | - | - | 30 | 30 | **440** |
| Labor Cost Schedule | - | - | - | - | 80 | - | - | 20 | 20 | **120** |
| Initial Design Review | 80 | 80 | 80 | 80 | - | - | - | 20 | 20 | **360** |
| Implement Frontend | - | - | 160 | 160 | - | - | - | 40 | 40 | **400** |
| Implement Backend | - | - | 160 | - | - | - | - | 40 | 40 | **240** |
| Testing & Refinement | 120 | 160 | 120 | 120 | - | - | - | 40 | 40 | **600** |
| Total Burdened Cost | **$66,444.00** | **$36,977.60** | **$75,296.00** | **$51,468.80** | **$20,570.40** | **-** | **$8,853.60** | **$13,232.00** | **$36,150.40** | **$308,993** |

# **Materials**

## Capital Expenses - Phil

This project requires no pre-existing infrastructure, or other forms of capital expenses to be completed.

## Non-Capital Expenses - Phil

|  |  |  |
| --- | --- | --- |
| **NON-CAPITAL EXPENDITURE ESTIMATE** | | |
| **Task** | **Materials** | **Cost** |
| System Implementation/Testing | 3 Laptops and a Desktop Computer | $2,750 |
| System Deployment/Public Environment | Intel NUC | $350 |
| **TOTAL** |  | **$3,100** |

# **Total Project Cost** - Phil

|  |  |
| --- | --- |
| **PROJECT LABOR & MATERIALS COST SUMMARY** | |
| **Cost Category** | **Estimated Cost** |
| Labor | $308,993 |
| Capital Expenses | $0 |
| Non-Capital Expenses | $3,100 |
| **TOTAL ESTIMATED PROJECT COST** | **$312,093** |

# **Project Schedule** - David

Project schedule included as Gantt chart on following page

# **Approvals**

|  |  |  |  |
| --- | --- | --- | --- |
| **Approver Name** | **Title** | **Signature** | **Date** |
|  | Project Manager |  |  |
|  | D2 Project Manager |  |  |