Task 1

1. **PACT analysis**

*People use technologies to undertake activities in contexts*

People

* Students from The University of Sydney
* Website admin(s)

Technologies

* Access to the Internet
* Input the keyword about the part of web development what they want
* View the tutorial material about what they want to learn
* Material came from the web-development-related courses from University
* Keyboard and mouse
* Tablet
* Smart phones

Activities

* Learn the basic skill of website development
* Discuss and solve problems with other developers

Contexts

* Related to web development skills and knowledge

1. **Investigation protocol**

To meet the authentic need of our users, the investigation for the website content should be conducted in following standards:

* Ensure the presented resources come with associated references
* Ensure the presented resources accommodate all the users’ need, e.g. both IT and Non-IT background supported, multi-language supported
* Project should be delivered through iterative design by user testing.
  + Card sorting techniques should be used to understand that how users conceptualize the presented content.
  + Evaluate the prototype by conducting cognitive walkthrough and Think aloud testing with formulated test plan.

1. **Implications of PACT analysis**

The design of UX is related to human characteristics in many ways. PACT analysis can help designers to get a full map of what factor of human will impact the interaction between human and computer(system).

People differ in terms of physical and psychological qualities, as well as in how they use systems. Activities differ in terms of timing, complexity, safety, and the type of content required. Physical, legal, and organizational characteristics of contexts differ. The input, output, communication, and content that technologies support is all different.

Task 2

1. Team-based Persona

|  |  |
| --- | --- |
| **Attribute** | **Value** |
| Name | John Columbia |
| Age | 22 (Second Year) |
| Gender | Male |
| Background | Grew up in ACT |
| Course(Degree) | Bachelor of Advanced Computing |
| Knowledge/Interests | Video games, Diving, Racing car, Singing |
| Skills | R studio, Java, Python, SQL |
| Goals | HD mark  Web design/development |

1. Survey-based Persona

|  |  |
| --- | --- |
| **Attribute** | **Value** |
| Name | Stella Lau (she/her) |
| Age | 21 (Second Year) |
| Gender | Female |
| Background | Born and grew up in Sydney |
| Reason for choosing USYD | Like all the societies on campus |
| Likes about USYD | Water bubblers |
| Dislikes about USYD | People sleeping in the library |
| Program of study | Advanced Computing (Data Science, Computer Science) |
| Favourite unit of study | INFO1113 |
| Personal challenges | Long commute |
| Career goal | Financially independent + self-employed |
| Plans after graduation | Full-time work |
| Goals | Prepare for job, learn to develop website and be proficient |
| IT Background | Yes |
| Expectation about the website | Python bottle |
| Preferred learning methods | Text and video |
| Special requirement | Multi-language support |

Survey result

Chart, pie chart

Description automatically generated

Chart, pie chart

Description automatically generated

Graphical user interface, application, Teams

Description automatically generated

Chart, pie chart

Description automatically generated

Chart, pie chart

Description automatically generated

Chart, pie chart

Description automatically generated

1. **How personas are created**

We formed survey and sent out to users to observe the common characteristics of the user group. Then created the persona of user group based on the result shown above. The persona includes several fictional-profile items and project specification related items.

Task 3

Task 4

1. **Notes on card sorting sessions conducted including the materials used for the card sorting sessions themselves**

We divided our sort into two parts, one of them is our website-function-oriented card sorting, another one is the card sorting about the programming knowledge.

The programming knowledge part achieved 100% agreement about the card sorting. The specified knowledge about HTML, Python Bottle, CSS and JavaScript will be assigned to HTML module, Python Bottle module, CSS module and JavaScript module respectively.

Graphical user interface

Description automatically generated with medium confidence

According to the result from website-function-oriented card sorting, this provide a clear idea about our website's design architecture on different page. Most of user agree the idea we are thinking for.

A picture containing table

Description automatically generated

1. **Information architecture of the website**

Wireframe

Diagram

Description automatically generatedDiagram

Description automatically generated

Task 5

Task 6