



HCLTech

Internship Report

Prepared by

HAMZA

Mentor

ISHITA PANDEY

Software Engineer at HCLTech

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instruction and rules and regulations for visit in campus and project.

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Introduction & Ice breaking Session

Organisation: HCL

Date: June 13, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- introductory
- Q&A
- what will be done in this internship told.

Discussion and Decisions:

- session started on time our mentor Ishita told what will be covered in this internship and please do active participation.
- We introduced ourselves to each other, mentioning their name, educational background, and technical skills.
- Various things we discussed like IT company, what work HCL do, how interview happens and many more.
- It was decided that each intern had to showcase their previous works in the coming weeks.
- At end of the meeting questions and answers.

Next Meeting:

The next meeting will be held on June 15, 2023 at 4:00 pm on Microsoft Teams.

Process of any technical development

Organisation: HCL

Date: June 15, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- Project Roadmap and Goal Setting
- Project Roles
- Bug Types and RPA Introduction
- Code Quality and Work-Life Balance
- Agile Development Model
- Task Management and Jira Dashboard
- Next Session to Next Session Preparation

Discussion and Decisions:

Project Roadmap and Goal Setting:

- at the very beginning of the session mentor told how they start insert the goals for project to to accomplish it very fast & in effective manner.
- The presenter discussed the concept of project epics, which are further divided into groups and tickets, forming a hierarchical structure.
- An example of a HCL project's Jira board was shown to the interns, giving them a visual representation of how project tasks are organised.

Agile Development Model :

- discussion done on agile model how it works and how it is better from the traditional model.
- The presenter displayed the roadmap of a cricket project for Cricket Australia, showing how the quarter of a time period is broken into sprints.
Project Roles: • The role of the SCRUM master, project owner manager, coders, testers, and technical architects were explained.
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- • Tasks were allocated to team members as tickets, which had set time frames measured in points, during each sprint, which in this case lasted two weeks.
- **Jira Dashboard and task management:**
- The tasks (tickets) given to team members were listed in the to-do column. The tasks shown in the "dev in progress" column were finished by developers, and a group peer review was done to assure high-quality work.
- Testing was done manually and automatically utilising a variety of test cases during the preparing for testing and testing stages. The assignment was declared as complete after the product owner manager approved the functionality.**Bug**

RPA :

- The mentor briefly introduced RPAs (Robotic Process Automation) and provided an eg related to OTP is real world automation.
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- Three bugs were explained:
 - a. Regression fault refers to when the code works properly but affects other functionalities.

- b. Dev fault happens when the code written by the developer does not meet the given task or standard.
- c. Product fault happens when a bug is not caught by testers and the faulty product is released.

Code Quality

- some people write codes in many lines but some in few lines was emphasized.

Next Session:

- Waterfall VS Agile model

Next Meeting:

The next meeting will be held on June 20, 2023 at 4:00 pm on Microsoft Teams.

Developmental Model Session

Organisation: HCL

Date: June 20, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- Atlassian
- DevOps
- Git and GitHub
- API(postman)
- Next Session Waterfall VS Agile model

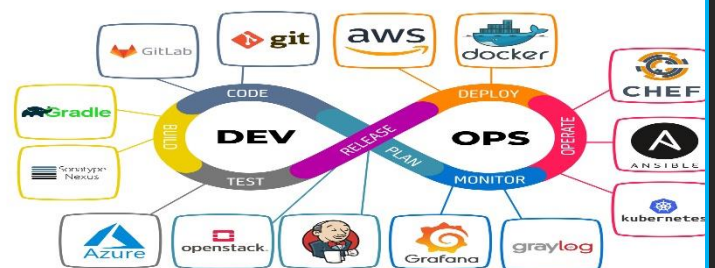
Explanation on agenda

Atlassian

- It design solution for all type of work.
- This is solution with design to facilitate collaboration and workflow across city.

DevOps

- This is a set of practice tool and cultural philosophy that automate integrate the process between software development and IT teams.



Git and GitHub

- i. **Git:** It manage project with repositories.
- ii. **GitHub:** It is a web-based git repository service.

Git is a software and GitHub is a service.

API

- I. It's application programme interface is messenger that processor request.

Next Meeting:

The next meeting will be held on June 27, 2023 at 4:00 pm on Microsoft Teams.
In which Bhavesh Reddy will present his work.

Waterfall VS Agile Model

Organisation: HCL

Date: June 22, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- waterfall Model VS agile Model (Drawbacks)
- scrum ceremonies

Explanation on agenda

Waterfall Model:

- i. It is linear sequential life cycle model.
- ii. It followed sequential order.
- iii. eg project development team only moves to next phase of a development
- iv. it is the traditional model to manage
- v. drawback it is ideal for small scale project size
- vi. not simultaneous development and testing activities

Agile Model:

- i. it promotes continuous interaction during SDLC process of any project.

- ii. It is different from waterfall model the development and testing activities are simultaneous and it can manage complex project waterfall model cannot that is suitable for small projects.

Waterfall Model	Agile Model
team size may consist more members	smaller teams show work done faster
nature of waterfall model once development process starts it not allowed to modify requirements	flexible as there is a possibility of changing requirements even after development process started.

Scrum ceremonies

- i. Are meeting that ensures scrum master product owner and development team in Sync.
- ii. The scrum event held at key instance in agile Sprint cycle.
- iii. When product owner and development team meet to plan work discuss work in progress and gather feedback is called scrum ceremony.

4 different scrum ceremonies

1. **Sprint planning** meeting held at the beginning of Sprint and where identify what can be delivered in the Sprint and how work will achieved.
 - a. **Attendees:** development team scrum master and product owner
 - b. **When:.** at the beginning of the Sprint
 - c. **Duration:** one hour per week

d. Agile framework

e. Purpose

2. **Daily stand-up** are short 15 minute daily meeting to discuss progress and identify blockers.
3. **Sprint review** the scrum team meet to reveal what was accomplished during the Sprint.
 - A development team shows which backlog items are done to stakeholders and teammates and takes feedback.

4. **sprint retrospective** is meeting to review what was successful during the Sprint and what can improve upon.

Hence agile ceremonies simply facilitate communication across the team.

Next Meeting:

The next meeting will be held on June 27, 2023 at 4:00 pm on Microsoft Teams. In which Bhavesh Reddy will present his work.

Presentation

Organisation: HCL

Date: June 27, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- presentation on snapshot photo sharing website

Bhavesh Reddy presented his project in front of Ishita and Hamza, He created that project after learning Django web framework.

Objective was people can upload their pictures on that website and comment edit search image etc.

Many libraries are used like: Django, bootstrap, taggit etc.

He discussed few limitations like UI and search is case sensitive in future he will improve them.

In website after login upload options comes user can comment but not edit that image.

He explained code which he wrote in Django

one limitation that I heard admin cannot edit post.

Hence the website was scalable but not deployed.

Next Meeting:

The next meeting will be held on June 04, 2023 at 4:00 pm on Microsoft Teams. In which Hamza will present his work.

Business proposal

Organisation: HCL

Date: July 06, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- discussion on presentation which you delivered by Hamza and Bhavesh.
- Offer to visit HCL headquarters.
- How to create business proposal with format.
- Journey of mentor.

Session started with pros and cons project which last week then mentor told we have to create a project it should have business approach.

Then Hamza got challenged to make UI and Bhavesh got challenge to learn ML algorithm and apply in project.

End submission date is 20 July before 8 we both have to visit to HCL headquarter.

Mentor shared her journey she created project in internship **blood donation website** which is example real world problem and she created solution for it.

Next Meeting:

The next meeting will be held on June 11, 2023 at 4:00 pm on Microsoft Teams.
In have to showcase business proposal start project.

Business proposal

Organisation: HCL

Date: July 11, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- To finalise business proposals

after greetings we planned to visit HCL on 14th July Friday to explore the culture and on which technology and how they work and see the campus and take a meal with mentor and Bhavesh.

In starting I also asked which project you created in data scientist in HCL then I presented my business proposal which was on diabetes prediction which takes 7 attributes to predict person is diabetic or not with 79% accuracy but unfortunately mentor told me to change so I will be presenting on Thursday.

Then Bhavesh Reddy presented his proposal related to password protector

and used data from kaggl to check accuracy strength of the password but how much secure is it?? But overall it is unique and best

Next Meeting:

The next meeting will be held on June 13, 2023 at 4:00 pm on Microsoft Teams. In which I will present second business proposal and mentor will tell challenges during transition from academics to corporate.

Instruction on HCL campus visit and project

Organisation: HCL

Date: July 13, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- Brief discussion on how to come and instruction on project.

- So session started mentor told things which we have to take with us and what not and the time to reach is important.
- Then me Hamza presented business proposal on IPL which predicts the probability in percentage for both teams.
 - Instruction to create project report with
 - problem statement
 - how it works
 - solution
 - which technology used
 - future expenditure
 - limitation
 - diagram.

Next Meeting:

The next meeting will be held on June 20, 2023 at 4:00 pm on Microsoft Teams. Mentor will give insight on challenges during transition from academics to corporate.

Python projects which can be created in higher semester.

Presentation on project

Organisation : HCL

Date: July 25, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- In detail Hamza delivered hey and presented his project.

Presentation started with my project presentation in front of Bhavesh and Ishita
lots of things a discussed life

problem

solution

purpose

conclusion

features scope

video clip

User interface etc

How it can be improved.

what not to use in user interface

Got remarkable appreciation by mentor Ishita on my work in which, I tried to
give my best.

For more batter registration please refer to the PDF named as *project
report_HCLTech_Hamza*

Next Meeting:

The next meeting will be held on June 27, 2023 at 4:00 pm on Microsoft Teams.
Bhavesh will present his project.

Instruction on HCL campus visit and project

Organisation: HCL

Date: July 27, 2023

Time: 16:00 - 17:00

Attendees: Ishita Pandey, Hamza, Bhavesh Reddy.

Agenda:

- Bhavesh Reddy presented his project

Bhavesh started presenting his project with introduction of synopsis then he created a project on password encryption which is the unique idea that I so and he is having knowledge of language which used to create user interface so he created remarkable user interface he told areas in which the project lags and future scope also and mentor appreciated his work and I also like his work.

