

## **Racketeer: An Online Marketplace for On-Demand Sideline Jobs in Pampanga**

Pedrito B. Basbas<sup>1</sup>, Renalyn A. Josafat<sup>1</sup>, Dino Pisay<sup>1</sup> and Mark Gil Superio<sup>2</sup>

<sup>1</sup>*Bachelor of Science in Information System, Institute of Computing Studies and Library Information Science, City College of Angeles*

<sup>2</sup>*Dean and Faculty Member, Institute of Computing Studies and Library Information Science, City College of Angeles*

---

*The traditional or manual process of job hiring and job applications in the Philippines is usually done in the form of papers. The Racketeer, an online marketplace for on-demand sideline jobs in Pampanga, aims to enhance such existing manual process in the province. The system lets the part-timer and the worker finder to post part-time related information and helps them to properly discuss matters. The modules that can be seen in this system are the admin, raketeros, and raketero finders' modules. The system was developed with the use of HTML (Hypertext Markup Language), Bootstrap, CSS (Cascading Style Sheet) and Javascript for the user interface of the website. The Php (Hypertext Preprocessor), AJAX (Asynchronous JavaScript and XML) and MySql were used in the back-end of the website. Most of the job hiring nowadays are using technology to reach potential employees. This app aims to reduce the paper loads and to improve the current manual process. The results of the system can enable people in the province to easily hire part-time workers or more conveniently market themselves as part-time workers.*

---

*Keywords: sideline, side hussle, part time, work, job*

### **Introduction**

Currently, many especially those who did not finish college and even those who graduated with degrees are struggling to find a job. According to Mansourvar (2014) unemployment is one of the serious social issues faced by both developing and developed countries. In the Philippines, according to Inquirer.Net, unemployment is most prevalent among the young. For each one hundred out of work Filipinos, seventy-four are younger than thirty-five years, and forty-four is below twenty-five. And for every one hundred without jobs, sixty did not transcend high school, with solely thirty-one really having graduated. There were eight who actually graduated from tech-voc courses and sixteen who finished college, yet still were unable to find work (Habito, 2017).

Full-time workers also said that their salary is not enough to sustain their daily needs. Based on the interview by the CNN Philippines in 2015, a bachelor said that in the Philippine setting, the salary is a common issue saying that he does not really earn a lot. He lives all the way in Fairview and all his prospect companies are either in Ortigas and Makati (Robillos, 2015). This kind of problem is the reason why the researchers created Racketeer. According to Raamaabaanu (2014), the purpose of e-recruitment is to make the processes involved more efficient and effective, as well as less expensive. Online recruitment can reach more potential employees and facilitate the selection process.

According to a survey by Interaksyon, a Filipino family's monthly budget "P42, 000 would be the estimate for a decent-enough living and not simply for survival" (Malasig, 2018). The

issue is some individuals only earn 10,000 a month that is why they are still finding an extra source of income by doing part-time jobs. According to Singh (2017), the growth rate of job hunters and job opportunities is drastically increasing due to the growth of education and advancements in technology. In addition, according to Inquirer.Net in January 2018, “most economists expect inflation in December to have risen at the same rate as November last year’s 3.3 percent, and would go on a trend this year as a result of the new or higher taxes to be slapped on goods under the government’s first tax reform package” (De Vera, 2018).

The increasing price of goods and taxes is also the reason why students are suffering. According to CollegeChoice (2018), students especially those who are in college are having a hard time paying a lot of expenses. Some of these expenses include tuition fee, room and boarding house, textbooks and school supplies, transportation and activity fees. This is the reason why college students do part-time jobs, but with their hectic schedules, they usually end up having low grades or failing grades as a result of doing sidelines.

The Racketeer aims to provide an alternative and convenient way for people to have an extra source of income by helping them to easily find a part-time job that suits their skills, capabilities, and schedules. According to Moghaddam (2015), college graduates are increasingly searching websites for e-recruitment opportunities, and websites are significant tools of the job search and recruitment process. Also, the Racketeer website wants to serve as an option for those who think that their salaries are not enough for their daily needs and wants. In this platform, those who do not have a college degree and/or even those who did not finish high school can have a decent way of earning based on their skills and capabilities. The Racketeer also wants to lessen the gap between the employers and part-time job seekers in a way that it is possible for them to have a part-time worker and an employer with less hassle and in a very convenient manner. According to Ahmed (2014), by using e-recruitment services job seekers get a better chance to increase their prospective job opportunities. These kinds of services give individuals time flexibility and more chances to attract passive job seekers resulting in a better chance to get the best match for hiring needs.

## **Problems**

The researchers’ observation led them to further understand problems relating to job hiring and posting that people encounter.

1. Jobseekers have limited access to information about part-time jobs.
2. Full-time workers still think that money is a problem even if they are earning on a regular basis.
3. Students want to have an extra budget but cannot work full time because of their school commitments.

## **Objectives**

The Racketeer is a system that involves recruitment. It connects recruiters and individuals who want to earn extra income in their free time. It also helps other companies to find part-time workers especially when their employees take leaves such as maternity leave, vacations, and other emergencies.

1. To be a platform that serves as a way for people to discover part-time jobs available and what perfectly suits their schedules.
2. To create an alternative and convenient way for everyone to earn more money.
3. To help students find a part-time job when they need to and for them to pay their expenses easily.

## **Method**

### *System Development Methodology*

System development methodology refers to the framework that is used to arrange, design and manage the process of developing a system. The researchers determined to use Scrum Methodology primarily to complete the system required to be developed within the study and to provide a better quality system in an exceedingly short amount of time. The entire Scrum process is limited in time. If the time of the sprint is over the operation has to be stopped.

Scrum is an associate degree agile project management methodology or framework used primarily for software progress that comes with the goal of delivering new software capability every 2-4 weeks. It is one of the approaches that influenced the Agile Manifesto that articulates a collection of values and principles to guide selections on ways to develop higher quality software quicker.

### *Phases of Agile Methodology*

#### *Product Backlog*

The researchers conducted brainstorming; all members of the group exchanged different ideas and contributed possible solutions to the problem statement. When ideas were gathered, the researchers wrote down a list of activities and talked about the next step that they would do, how to do it and the essence of that activity to the development of the system. These served as their guidelines in monitoring their tasks and their progress.

Since the researchers used the Scrum methodology, Scrum roles were identified. The Scrum master is the person with direct contact with the customer and is responsible for assessing prioritized requisites, coordinating, assigning tasks and supervising the work of the development team. The Scrum master is the capstone adviser and the capstone instructor. Another Scrum role is the product owner, who decides what next step to be done and gives recommendations for the system. The product owner is the panelists.

#### *Sprint Backlog*

This phase of the Scrum method contains all the activities the researchers started to do and the completed tasks that are primarily presented on the Product Backlog phase. The researchers conducted a survey to gather the information that was needed in developing the system to determine its functionality. The purpose of the system is to help people in need of sideline jobs. On the front page of the website, there is a login form for the users. Both the raketero and the finders accounts have the privilege of viewing the sideline job categories. They

can change their password and profile pictures on the settings menu. The admin login page is seen at a certain URL.

### *Sprint Week*

The Scrum methodology helps the developers to produce outputs weekly. This methodology helps the developers to add changes easily without following steps or phases which other methodology has that makes it hard for developers to make changes.

The researchers scheduled meetings twice a week to talk about the tasks that they had done in the past week and their contributions to the study. They also talked about the next sprint that they needed to do for the next week.

Unit testing was integrated by the developer to know and/or avoid errors in the development of the system. Good unit testing can detect any defects on the system and make the developer aware of the problem. It also makes debugging easier.

Integration testing was performed after unit testing. Integration testing can expose faults that may harm the development of the system. This testing is important because it can detect interface defects on the system; the developer can immediately update or change the code more easily to prevent any defects.

System testing is the testing of the functionality of the system as a whole. This is used by developers to check if they meet all the requirements the system needed. System testing is a series of tests that fully test all the functions of the system for its purpose.

### *Sprint Review Meeting Release*

Sprint review meeting is held every after each sprint. At this phase, the researchers talked about all that they had accomplished for the past weeks and the on-going tasks that they needed to do. The unfinished task was re-estimated and was expected to be completed in the next sprint.

After the system testing, acceptance testing was integrated by the developer. The acceptance testing is used to check if the system developed meets and reaches the requirements needed and if it is acceptable and ready for deployment based on the panelists' evaluation.

## **Results**

### *Evaluation Results*

This section presents the results of the surveys conducted by the researchers. The system's performance was evaluated in terms of functional suitability, performance efficiency, compatibility, usability, reliability, security, maintainability, and portability. The evaluation came from the potential part-time workers and employers and IT experts.

*Table 1. Assessment of I.T. Experts*

<b>Criteria</b>	<b>Mean</b>	<b>Descriptive Rating</b>	<b>Rank</b>
Functional Suitability	4.28	Excellent	2
Performance Efficiency	4.15	Very Good	3
Compatibility	4.38	Excellent	1
Usability	3.46	Very Good	4
Reliability	4.15	Very Good	5
Security	3.42	Very Good	3
Maintainability	4.28	Excellent	2
Overall mean:	4.15	Very Good	

This table summarizes the evaluation results from the three (3) IT Experts. performance of the system gained an overall rating of 4.15, which is equivalent to a “very good” rating. This shows that the system performs well and can be developed by future researchers.

*Table 2. Assessment of Non-IT Experts*

<b>Criteria</b>	<b>Mean</b>	<b>Descriptive Rating</b>	<b>Rank</b>
Functional Suitability	4.38	Excellent	2
Compatibility	3.43	Very Good	4
Usability	4.46	Excellent	1
Security	4.15	Very Good	3
Overall mean:	4.27	Excellent	

Table 2 shows the evaluation results from one hundred (100) non-IT experts who included 50 potential employers and another 50 potential part-time workers. The performance of the system gained an overall rating of 4.27, which is equivalent to an “excellent” rating.

## **Discussion**

The participants were the potential part-time workers and potential employers. The study used the convenient sampling method for non-IT experts while purposive sampling was used for the IT experts.

The overall mean of non-IT experts’ evaluation was 4.27 (excellent rating). The usability criterion ranked as the highest rating with 4.46 (excellent), while the lowest rank goes to the compatibility criterion which has 3.43 (very good).

The overall mean of IT experts’ evaluation was 4.15 (very good). The highest-ranked criterion is efficiency with 4.38 rating (excellent)while the lowest rank goes to security with 3.42 rating (very good).

The IT experts suggested to the researchers to change the terms used on the website to be more understandable and user-friendly. They also said that the system still needed improvement but it was interesting and could possibly be a popular website someday.

## Conclusion

This section presents the conclusions of the researchers on the system as a whole.

1. The researchers created the system with a form that includes date availability for the users to properly schedule their activities.
2. The researchers created the system with part-time job categories for the users to easily find what kind of job they are capable of and to help them earn based on their capabilities.
3. The researchers created the system with a form that includes minimum and maximum hours of work so students and other users can estimate how much they can earn and the limit of time they can work.

The following are the suggestions for further research:

1. Make a mobile application version of the system that is compatible with Android and IOS devices.
2. Use SMS notification that notifies the user without having to use the Internet.
3. Use other online payment other than ATM cards for more convenient transactions.
4. Make a feature where the system can monitor specific details established by the employer and the part-timer.
5. Extend the coverage of the system nationwide.
6. Make a system feature that can record tips of the employer to the part-timer.
7. Make a system feature where recruiters can invite people directly.
8. Provide online examinations for the evaluation of workers.

## References

1. Ahmed, S. (2014). *E-Recruitment Transforming the Dimensions of Online JobSeeking: A Case of Pakistan*. Retrieved from Research Gate: [https://www.researchgate.net/profile/Shuaib\\_Ahmed/publication/272079614\\_E\\_Recruitment\\_Transforming\\_the\\_Dimensions\\_of\\_Online\\_Job\\_Seeking\\_A\\_Case\\_of\\_Pakistan/links/54d9e3ff0cf25013d04352b0](https://www.researchgate.net/profile/Shuaib_Ahmed/publication/272079614_E_Recruitment_Transforming_the_Dimensions_of_Online_Job_Seeking_A_Case_of_Pakistan/links/54d9e3ff0cf25013d04352b0)
2. Bhat. (2018). *Convenient Sampling*. Retrieved from Question Pro: <https://www.questionpro.com/blog/convenience-sampling/>
3. CollegeChoice. (2018). *What are the Major Expenses for Students*. Retrieved from College Choice: <https://www.collegechoice.net/college-life-3/what-are-the-major-expenses-for-students/>
4. Crossman. (2019). *Purposive Sampling*. Retrieved from ThoughtCo: <https://www.thoughtco.com/purposive-sampling-3026727>
5. De Vera, B. O. (2018). *Economists: Brace for faster price increases in 2018 due to tax reform law*. Retrieved from Philippine Daily Inquirer: <https://business.inquirer.net/243505/economists-brace-faster-price-increases-2018-due-tax-reform-law>
6. FluidSurveysTeam. (2014). *Descriptive Research: Defining Your Respondents and Drawing Conclusions*. Retrieved from Fluid Surveys: <http://fluidsurveys.com/university/descriptive-research-defining-respondents-drawing-conclusions/>
7. Habito, C. F. (2017). *Profile of the Filipino Worker*. Retrieved from Philippine Daily Inquirer: <https://opinion.inquirer.net/103546/profile-filipino-worker>
8. Malasig, J. (2018). *Surviving versus living: The Filipino family's monthly budget*. Retrieved from Interaksyon: <http://www.interaksyon.com/breaking-news/2018/06/11/128411/filipino-family-basic-monthly-income-p42000-or-p10000/>
9. Mansourvar, M. (2014). *Development of a Job Web Portal to Improve Education Quality*. Retrieved from ResearchGate:

10. Moghaddam, H. A. (2015). *Examining Job Seeker's Perception and Behavioral Intention toward Online Recruitment: A PLS Path Modelling Approach*. Retrieved from Semantic Scholar: [https://www.researchgate.net/profile/Muslim\\_Amin2/publication/274071282\\_Examining\\_job\\_seekers%27\\_perception\\_and\\_behavioural\\_intention\\_toward\\_online\\_recruitment\\_A\\_PLS\\_path\\_modelling\\_approach/links/5b2bbd764585150d23bc52cd/Examining-job-seekers-perception-a](https://www.researchgate.net/profile/Muslim_Amin2/publication/274071282_Examining_job_seekers%27_perception_and_behavioural_intention_toward_online_recruitment_A_PLS_path_modelling_approach/links/5b2bbd764585150d23bc52cd/Examining-job-seekers-perception-a)
11. QuestionPro. (2019). *What is a Survey*. Retrieved from QuestionPro: <https://www.questionpro.com/blog/?s=what+is+a+survey&lang=en>
12. Raamaabaanu, D. R. (2014). *Importance and Problems of E-Recruitment*. Retrieved from SemanticScholar: <https://pdfs.semanticscholar.org/29c2/d3edee3e0f96e60a36d14033f734ff7aef65.pdf>
13. Robillos, A. J. (2015). *Dilemma: To land first job, get work experience first*. Retrieved from CNN Philippines: <https://cnnphilippines.com>
14. Singh, D. D. (2017). *Firefly Optimization Based Dimensionality Reduction for Improving Accuracy in Job Hunting*. Retrieved from <http://www.ijcse.com/docs/INDJCSE17-08-03-126.pdf>
15. TechTargetTeam. (2015). *Use Case*. Retrieved from Tech Target: <https://searchsoftwarequality.techtarget.com/definition/>