

Bachelors of Science in Information Technology  
**Gyalpozhing College of Information Technology**



**Proposal**  
**For**  
**Second Year Project**  
**Bachelor of Science in Information Technology**

**Random Picker**

**Submitted by:**

**SONAM CHEDA (1219076)**

**Gyalpozhing College of Information Technology**

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**Read carefully before filling the form.**

- 1 Please do not alter the layout of the application form. Information must be filled in the spaces provided, under set format.
- 2 Guidance notes in various fields should not be deleted.
- 3 Required information should be duly filled in the specified fields.
- 4 Required heads/fields which are not relevant to the project should be marked **N/A** (Not Applicable) or left blank and should not be deleted.

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**Guidelines and Forms**

**Submission Procedure**

Duly filled proposal forms completed in all respects should be submitted in form of soft copy and a hard copy to project guide and project coordinator. On receipt of the applications the proposals will be evaluated by reviewer panel and proposal would then be defended by student groups. The project group may need to revise the proposal in light of the evaluator's recommendations.

**For further information, please contact:**

Project Coordinator

Ms.Sonam Wangmo

*[sonamwangmo.gcit@rub.edu.bt](mailto:sonamwangmo.gcit@rub.edu.bt)*

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**Application for Final Year Project**

1. Project Identification

<b>A Reference Number:</b>  (for office use only)
<b>A Project Title:</b>  Random Picker
<b>A Project Internal Guide:</b>  Name: _____ Designation: _____ Organization : _____ Mobile # : _____ Tel. # : _____ Email: _____
<b>C1. Project External Guide:</b>  Name: <b>NA</b> _____ Designation: _____ Organization : _____ Mobile # : _____ Tel. # : _____ Email: _____
<b>C2. Student Group Lead:</b>  Name: _____ Roll No: _____ Department: _____

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Mobile # :		Tel. # :	
Email:			

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<p><b>A Organizations Involved in the Project:</b></p> <p><i>(Please identify all affiliated organizations collaborating in the project, and describe their role/contribution to the project.)</i></p>								
<p><b>D1. Industrial Organizations:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%; padding: 5px;">#</th> <th style="width: 60%; padding: 5px;">Organization Name</th> <th style="width: 35%; padding: 5px;">Role / Contribution</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px; text-align: center;">NA</td> <td style="padding: 5px;"></td> </tr> </tbody> </table>			#	Organization Name	Role / Contribution		NA	
#	Organization Name	Role / Contribution						
	NA							
<p><b>D2. Academic Organizations:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%; padding: 5px;">#</th> <th style="width: 60%; padding: 5px;">Organization Name</th> <th style="width: 35%; padding: 5px;">Role / Contribution</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> </tbody> </table>			#	Organization Name	Role / Contribution			
#	Organization Name	Role / Contribution						
<p><b>D3. Funding Organizations:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%; padding: 5px;">#</th> <th style="width: 60%; padding: 5px;">Organization Name</th> <th style="width: 35%; padding: 5px;">Role / Contribution</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px; text-align: center;">NA</td> <td style="padding: 5px;"></td> </tr> </tbody> </table>			#	Organization Name	Role / Contribution		NA	
#	Organization Name	Role / Contribution						
	NA							
<p><b>A Key Words:</b></p> <p><i>(Please provide a maximum of 5 key words that describe the project. The key words will be incorporated in our database.)</i></p> <p>1) Random</p> <p>2) Picker</p> <p>3) List</p> <p>4) Group</p> <p>5) Number &amp; Name</p>								
<p><b>A Research and Development Theme:</b></p> <p>To develop a Randomly generator of name or number from the provided list          Which help to small group or organization with maximum of fifty members. It</p>								

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allows to select randomly like and lucky draw. It will be useful when organization are not able to decide such as leader among themselves. So that the random picker will is helpful for selecting by lucky draw.

**A Project Status:**

(Please mark ☒ )

☒ New      Modification to previous Project

Extension of existing project



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**A Project Duration:**

Expected Starting Date: 09/02/2021

Planned Duration in Six Month  
months:

2. Scope, Introduction and Background of the Project

**A Scope of the Project:**

**User Scope:** The project aims are to provide a platform for mobile applications to randomly pick a Name or Number from a group from the list to decide the winner/group from the collected list.

**System Scope:** It will be an Android based application which will include the following features:

**View:** Every user can able to view the application.

**Add:** Every individual user can add a list (name & number).

**View Result:** Only through the phone of the list creator can view the result by everybody.

**Generate:** Only one people can generate the list to select winner.

**A Introduction (Project Background and Literature Review, Current State of the Art):**

*(Detailed summary of what all has been done internationally in the proposed area quoting references and bibliography. Please note that this section demonstrates the depth of knowledge of the project team and builds the confidence of the evaluators about capability of the team in achieving the stated objectives.)*

*(Please describe the current state of the art specific to this research topic.)*

**Introduction and Background**

The term Random Picker is to pick a name or number randomly from a collection. It is happening when there are no particulars to select or when there is an opportunity for all but only to select fewer numbers from the list or from the group. In such a case before the advancement of technology, people use to select through lucky draw manually where all the list are put into the box and one can draw the winner from the box or higher authorities can select(pinpoint) the winner which has a poor efficient method since wasting of time and people will also not feel the fairness if somebody pinpoint when the opportunity is for all. so it better to have a random picker mobile application which gives a lot of advantages.

Therefore, the "Random Picker" is a mobile application that allows everyone to create a list (name of people, number and etc) so that it can pick randomly from the list, and also one can able to form a random group from the list by selecting the required number of the group. All over this Random Picker is quick, easy to use, and ensures fairness as well as it will also take away any pressure you might feel about choosing the winner yourself.

**Literature Review:**

**Instagram comment picker an Facebook Giveaways**

Kamila Palka developed an application that called Instagram comment picker which helps you to select a winner from all of your Instagram followers who have left a comment on your post You may set the minimum number of

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characters in a comment as well as the number of accounts that are tagged. If you need any ideas on how to organize your Instagram giveaway, look at Tombow's success story to see how they chose winners at random for their 12 Days of Christmas giveaway collection, which is completely free to participate in the first Instagram giveaway!

Giveaways on Facebook are also perfect for increasing interaction as well as brand recognition and visibility. So, if you're running a Facebook sweepstakes, you can now select a winner at random using our Facebook giveaways random picker! Draw a winner at random from all of the people who liked or commented on your story! Choose the replacements and share the Certificate of Validity to demonstrate the winner's transparency.

**Choosing a winner of your social media promotion**

If your promotion is a photo, video, or writing contest, you should allow the voting mechanism so that the winner can be determined by public vote. This has the advantage of encouraging voter engagement and engaging your group of followers. Furthermore, both participants will make every effort to spread the word about the promotion to their families and friends, as they will be working hard to get as many votes as possible. This will also increase competition among the competitors. You must, however, ensure that the voting is conducted equally. Fortunately, with Easypromos applications, the winner can be determined by a popular vote, and you can keep track of the results at the same time. There's a different way to do it. Request that the public vote on the top three entries, and then select the winner from the top three votes. When it comes to social media sweepstakes based on likes or comments, though, a random name selector is the only rational way to choose a winner.

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**A Challenges:**

*(Please describe the challenges, specific to this research topic, currently being faced internationally.)*

For Developers:

- Connecting database with the application since there are many information to

stored.

- Exploration of android development in details will take time as we are not yet

fully introduced with how to develop the Mobile Application.

For Users:

- Adoption of the application since since there are other application to discuss..

**A Motivation and Need:**

*(Please describe the motivation and need for this work.)*

Every new semester in my class when the selection of class representative(CR) is done volunteer basis. However, if no volunteer being as a class representative then we go for a lucky draw in order to select CR. Nevertheless, also when we randomly form a group in class we always go for roll number-wise or pick the individual to form a group. Therefore, the solution for mention above point motivates me to develop an application that automatically generates the winner or group from the give list which gives a precise, scientific procedure whereby each unit from the list has an equal chance of selection for inclusion in a sample.

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3. Aim and Objectives of the Project

*(Please write the actual aim of your project. Also, describe the measurable objectives of the project and define the expected results. Use results-oriented wording with verbs such as 'to develop', 'to implement', 'to research', 'to determine', 'to identify..'. The objectives should not be statements and should not include explanations and benefits. The objective should actually specify in simple words what the project team intends to achieve (something concrete and measurable/ deliverable). Fill only those objectives that are applicable to the proposed project.)*

**AIM:**

Develop an android application for randomly picking anything of your choice, along with the formation of groups.

**OBJECTIVES:**

The objectives of the project are:

- ✓ To build a mobile application for randomly picking anything of your choice and randomly form a group from the given list.
- ✓ To provide an efficient and fair selection or formation of groups from the given list.
- ✓ To provide an easy procedure whereby each unit in a population has an equal chance of selection for inclusion in a sample.

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4. Methodology

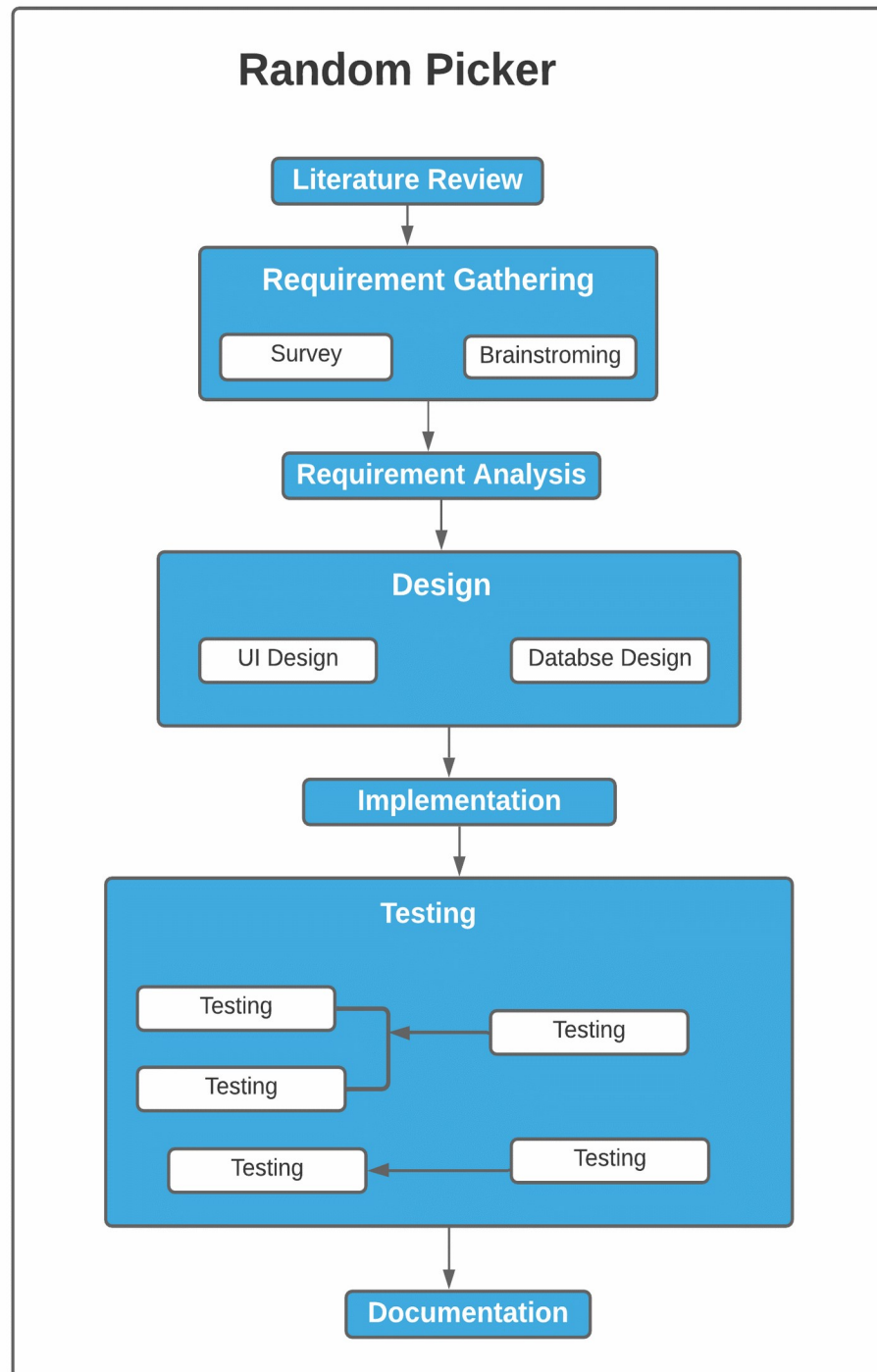
**A Development / Research / Test Methodology:**

*(Please describe the technical details and justification of your development and research plan and test plan and testing strategies. Identify specialized equipment, facilities and infrastructure which are required for the project and their utilization plan. The block diagrams, system flow charts, high level algorithm details etc. have to be provided in this section. Also, describe the overall methodology to be used for the particular research topic)*

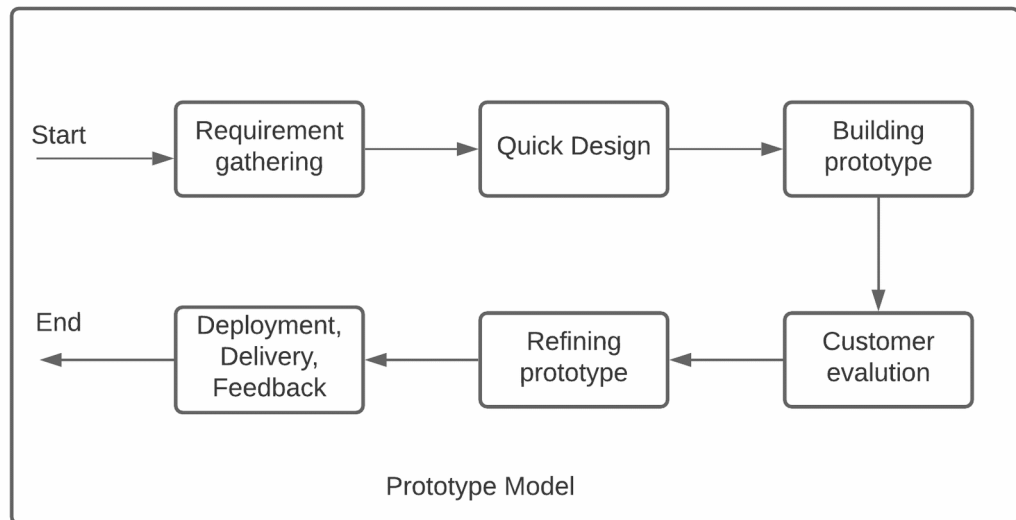
**General methodology**

The given below diagram is the general methodology used for the whole project. A literature review on the need of Random picker app is thoroughly carried out. A study on various app and website is done in order to identify the appropriate features to be included in the app. After

literature review, requirement gathering is done through brain storming and conducting survey. In the process of requirement gathering, a research paper is produced to find out the feasibility of the app with the survey as a data. Design followed by implementation of the project, testing and documentation will be done as general method for the successful completion of project.



### **Development Methodology**



Software model shown above shows the model used for the project. A prototype model is chosen as it is found to be most appropriate for my project. Prototyping model starts with a set of

general objectives for the application. The system evolves by adding new features until the final

system is developed. It includes the steps as shown above and if we find any need for the changes to be made for the design or requirements in the later period, we can revisit the earlier phase. In this way, Prototyping model was applicable for my project.



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<b>A Project Team:</b>	
<b><i>Title / Position</i></b>	<b><i>Number</i></b>
Project Internal Guide	
Project External Guide	
Student Team Members	
Others (please specify)	
Add more rows if required	
<p><b>A Project Activities:</b></p> <p><i>(Please list and describe the main project activities, including those associated with the transfer of the research results to customers/beneficiaries. The timing and duration of research activities are to be shown in the Gantt chart in Section 8.)</i></p> <p>Followings are the key activities that will be carried out in for the development of this mobile application:</p> <ol style="list-style-type: none"> <li>1. Installation of software and tools: Installing Android Studio version (2 and above) and Java Development Kit (v8 or more).</li> <li>2. Literature Review: Referring books, video tutorials, online reference related to android app development and research papers for the literature review.</li> <li>3. Brainstorming and conducting surveys for the requirements gathering.</li> <li>4. Design.</li> <li>5. Second prototype: Login</li> <li>6. Development of Prototype</li> <li>7. Final Testing</li> </ol>	

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8. Delivery and feedback

9. Documentation

10. Report Writing.

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**A Key Milestones and Deliverables:**

*(Please list and describe the principal milestones and associated deliverable of the project. A key milestone is reached when a significant phase in the project is concluded, e.g. selection and simulation of algorithms, completion of architectural design and design documents, commissioning of equipment, completion of test, etc.) The timing of milestones is also to be shown in the Gantt chart in Section 8.*

No.	Elapsed time from start (in months) of the project	Milestone	Deliverable
	-	Commencement of the project	
	9/02/2021-13/02/2021	Topic Selection	Selection of topic
	14/02/2021-20/02/2021	Brainstorming & survey on topic	Feasibility study
	21/02/2020-27/02/2020	Requirement gathering	SRS document
	28/02/2020-14/03/2020	Project proposal writing (background, literature reviewed).	Project proposal report
	15/03/2020-20/03/2020	Requirement analysis	Finalize the requirement
	21/03/2020-30/03/2020	Designing of project	UI design
	01/04/2020-	Implementation of Code	Implementation(first, second &

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	25/05/2020		third prototype)
	26/05/2020- 15/05/2020	Testing(unit, system, integration testing)	Testing
	16/05/2020- 21/05/2020	Documentation of project	Documented
(Please add more rows if required.)			

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5. Benefits of the Project (Expected output/outcomes):

Some of the benefits or outcomes of my application are;

1. Provide an efficient and fair selection
2. Easy formation of groups from the given list
3. Save time.

6. Risk Analysis/Feasibility

**A Risks of the Project:**

(Please describe the factors that may cause delays in, or prevent implementation of, the project as proposed above; estimate the degree of risk.)

(Please mark <input checked="" type="checkbox"/> where applicable)	Low	Medium	High
Technical risk	<input checked="" type="checkbox"/>		
Timing risk		<input checked="" type="checkbox"/>	
Budget risk	<input checked="" type="checkbox"/>		

**A1. Comments (Describe the risk):**

**Technical risk:** For the development of this Random Picker application, the technical risk is low because due to advancement of the technology easily repair crashed working devices. Even if crashed of laptop or misplace of working document can be easily backup through the use of google drive, hard disk and etc.

**Timing risk:** Due to lots of co-curriculum activities and many more activities happening within the college which divert our mind and hampered to complete the project.

**Budget risk:** For our project free software available online will be made use of therefore, the budget risk is relatively low for developing this voting application.

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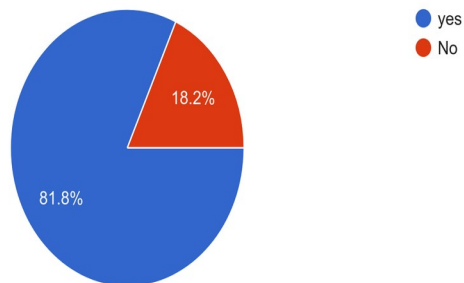
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### Feasibility Study

Feasibility Study was done through survey with the help of the google form and the result from this survey are:

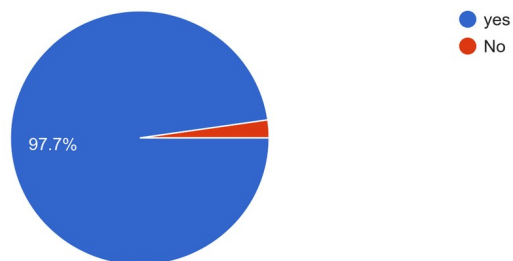
1) Would you prefer randomly picking mobile application platform instead of lucky draw?

44 responses



2) Do you think randomly generating winner using mobile application will save time compare to lucky draw happening manually?

44 responses

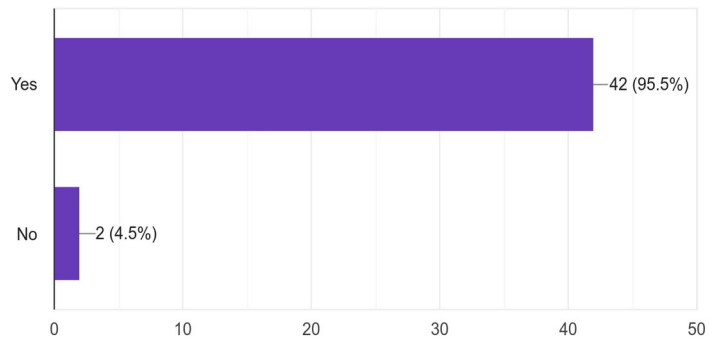


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2) Do think Random picker application provide an easy procedure whereby each unit in a population has an equal chance of selection for inclusion in a sample?

44 responses



Therefore, from the above survey from almost 98.3% of participants responded that if random picker mobile application is better then lucky draw. So it is feasible to have a random picker mobile application.

#### 7. Project Approval Certificate

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*(Approval of Project Proposal by the Competent Authority (Department Chairman) and Project Review Team is mandatory before the start of project execution.)*

**Project Review Team:**

Sl #	Name	Signature
------	------	-----------

(Please add more rows if required.)

***Project Coordinator***

Name:

Designation: *14.*

Email:

Date:                      Signature:

***Competent Authority – Head of Department***

Name:

Designation:

Email:

Date:                      Signature

& stamp:



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8. Reviewers Panel Comments

10. Project Schedule / Milestone Chart /Work plan

*(Project schedule using MS-Project (or similar tools) with all tasks, deliverables, milestones, clearly indicated are preferred. Task should be measured in terms of hours)*

1	Task Name	Start Date	Finished Date	Days to complete
2	Topic Selection	2/9/2021	2/13/2021	4
3	Feasibility study	2/14/2021	2/20/2021	11
4	SRS document	2/21/2021	2/27/2021	6
5	Project Proposal report	2/28/2021	3/14/2021	14
6	Requirement Analysis	3/15/2021	3/20/2021	5
7	UI Design	3/21/2021	3/30/2021	9
8	Implementation	4/1/2021	5/25/2021	54
9	Testing	5/26/2021	6/15/2021	20
10	Documentation	2/9/2021	6/21/2021	132

13. Report Writing Guidelines

*(Project report will be written under the specified guidelines.)*

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**14. Bibliography**

Blog, E., 2017. *Is a Random Picker the Best Way to Select the Winner?* | *Easypromos*.  
[online] News about digital marketing campaigns: giveaways, contests, games and more.  
Available at:

<<https://www.easypromosapp.com/blog/en/2017/12/is-a-random-picker-the-best-way-to-select-the-winner-of-your-contest/>> [Accessed 14 March 2021].

Palka, K., 2019. *Random Picker*. [online] Miniwebtool.com. Available at:  
<<https://miniwebtool.com/random-picker/>> [Accessed 14 March 2021].