**Software Implementation and Testing Document**

**For**

**Group <13>**

Version 3.0

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# Programming Languages

*Programming Languages:*

* *Python: Used as the interpreter and base language for the project and was mutually agreed upon by each group member*
* *Html: Used in the creation and editing of web pages in the group’s website*
* *CSS: Used in editing style of Html web pages*
* JavaScript: *Used to add additional client-side functionality*

# Platforms, APIs, Databases, and other technologies used

*Platforms:*

* *Pycharm IDE: Used for the implementation of the Django project*
* *Sqlite: used for relational tables to store data*
* *Django: This was used and needed for the web development portion of our group’s project*
* *Django Admin: used to manage, create, and edit database rows, instead of having to manually edit them using SQL*

# Execution-based Functional Testing

* In our project we used Black box testing in different part of our codes. For instance in our search page the search outputs should match the searched keyword. We tested it with different keywords and confirmed the correctness of the output.
* Another example is on News page;- here also we used black box testing. What we did was randomly picked one game and rated it higher than any game. Since the highest rated game showed on top of the news, we confirmed that the functionality of our code.

# Execution-based Non-Functional Testing

We tested nonfunctional requirements, such as security, mostly in the same way we tested our functional requirements. As we have no automated testing infrastructure, we tested things like logging in by performing actions manually.

* In our project we tested register and login forms for security. We tested different cases of username, email address and passwords.
* Also, we tested the speed of our web-page from different platforms and we confirmed that the response time is very good.
* We performed compatibility test of our web-page with Chrome, Firefox, Opera and Safari browsers. In all above browsers our web-page works flawlessly.

# Non-Execution-based Testing

Since the project involve designing UML diagram, every function code of our project is reflected on the Requirements and Design Document. Every team member has carefully examined and make sure everything is correctly designed and applied.