Khidmat: Teaching Programming on Scratch

Syed Ahsan Ahmed sa02908

This project is to teach programming concepts on Scrach using Drag-Drop programming to underpriviliged students at Fixit School.

Fixit School is a non-profit organization and an initiative by FIXIT to provide free education to the underprivileged children of Pakistan. Students of all ages are taught fundamental subjects, such as English, Maths, Science, Urdu, Islamiat.

Fixit School teaches its students the fundamental subjects of Science and Literature. It was felt that the students should be taught basic programming concepts on Scratch (Drag-Drop programming) that they can use in the lives ahead and progress in the field of Computer Science.

We will be teaching the students 2 hours daily on Fixit School's premises under the supervision of their Admission Manager. The goal is to teach them the basic programming concepts and make them capable of building their own games using drag-n-drop programming on Scratch.

Week 1: 14–18 May, 2018

We spent this week teaching the students for-loops, and if-statements. Board games, two 'Hour of Code' and the EDVON software, were used to teach these concepts.

| Item | Activity | Time | ID |
|------|------------------------------------|---------|---------|
| 1 | Board games | 2.5 hrs | sa02908 |
| 2 | Hour of Code practice (2 sessions) | 2.5 hrs | sa02908 |
| 3 | For loops | 2.5 hrs | sa02908 |
| 4 | If Statements | 2.5 hrs | sa02908 |

| ID | Total Hours |
|---------|-------------|
| sa02908 | 10 hours |

Week 2: 21-25 May, 2018

We spent this week teaching the students while-loops, along with practice on hour of code. Students were also familiarized with EDVON.

| Item | Activity | Time | ID |
|------|------------------------|----------|---------|
| 1 | While loops | 2.5 hrs | sa02908 |
| 2 | Hour of Code practice | 2.5 hrs | sa02908 |
| 3 | Edvon Practice (loops) | 5 hrs | sa02908 |

| ID | Total Hours |
|---------|-------------|
| sa02908 | 10 hours |

Week 3: 28 May-1 June, 2018

We spent this week teaching the students about Events, variables, and the types of variables.

| Item | Activity | Time | ID |
|------|-------------------------|---------|---------|
| 1 | Events | 2.5 hrs | sa02908 |
| 2 | Variables | 2.5 hrs | sa02908 |
| 3 | Edvon Practice (events) | 5 hrs | sa02908 |

| ID | Total Hours |
|---------|-------------|
| sa02908 | 10 hours |

Week 4: 4–8 June, 2018

We spent this week giving students extensive hands-on-learning experience and creating games games.

| Item | Activity | Time | ID |
|------|----------------------|--------|---------|
| 1 | Edvon Practice (all) | 10 hrs | sa02908 |

| ID | Total Hours |
|---------|-------------|
| sa02908 | 10 hours |

Week 1: 11-14 June, 2018

We spent this week giving students dense hands-on-learning experience and creating games games.

| Item | Activity | Time | ID |
|------|----------------------|---------|---------|
| 1 | Edvon Practice (all) | 4 hrs | sa02908 |
| 2 | Exam | 2.5 hrs | sa02908 |
| 3 | Viva | 1.5 | sa02908 |

| ID | Total Hours |
|---------|-------------|
| sa02908 | 8 hours |

Conclusion

Our project was to teach the students of Fixit School programming on Scratch. We started by teaching them concepts like loops and statements through on-board games and then moved to 'Hour of Code' sessions. After the students had done sufficient practice on it, we moved them to EDVON and familiarised them with its tools. At the end of the classes, students had learned to create their own games on EDVON/Scratch, and had already developed 10+ games, including a multiplayer game.

Khidmat Completion Form

To be completed by the external supervisor.

| Please use the space below to provide any comments you may have on the students' performance, the Khidmat program, or any other feedback you want to share with Habib University's Khidmat committee. We can also be reached at khidmat@sse.habib.edu.pk. |
|---|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| I hereby certify that I supervised Syed Ahsan Ahmed for the Khidmat described in this report. Furthermore, that I have read and agree with the weekly updates included in this report. My signature below marks the successful completion of the work undertaken for the Khidmat. |
| |
| |

Location and date

Name and signature

Khidmat Completion Form

To be completed by the external supervisor.

Please use the space below to provide any comments you may have on the students' performance, the Khidmat program, or any other feedback you want to share with Habib University's Khidmat committee. We can also be reached at khidmat@sse.habib.edu.pk.

Fixit School Management is thankful to Habib University's Whidmat Committee to provide best services free of cost. I, personally, thank Mr. Syed Ahsan Ahmed to serve his services with dedication.

Looking Arwand to see you in Juliane.:

I hereby certify that I supervised Syed Ahsan Ahmed for the Khidmat described in this report. Furthermore, that I have read and agree with the weekly updates included in this report. My signature below marks the successful completion of the work undertaken for the Khidmat.

Name and signature

Fixit School.

At Abul Hasan As Jahani Road

Location and date

30 Jul 18.