

Experience Report: Digital Games and VR BIP

Attendee: Vishnu Prakash, Arjun

Course: Computer Engineering for IoT Systems (M. Eng.), 1st Semester

Venue: Polytechnic Institute of Cávado and Ave (IPCA), Barcelos, Portugal

Duration: 13 March to 28 April 2023

Face-to-face week: From 26 to 31 March at IPCA Campus (Portugal)

About the program

“BIP on Digital Games and VR is a blended intensive program jointly coordinated by Polytechnic of Cávado and Ave (IPCA), Nord University Norway and TU Wien, Austria. The BIP on Digital Games and VR is a course where you’ll learn the basic aspects of game design, will be introduced to unity as the game engine, and will get to know the characteristics, concepts, and potential and possible drawbacks of virtual reality.”

- IPCA [website](#).

My Experience

The starting point of this journey was an email from the International HSN notifying about the program, inviting applications. I casually looked up the website of IPCA about the program. Being a software engineer who played various roles in conventional software development lifecycle for about 7 years, I always used to wonder about the methodology and process through which all those games I used to love playing starting from my childhood till date came to life and this program sounded like the perfect opportunity to find my answers. About a week since the application, I got to know about having been selected. As this was my first time given an opportunity to participate in an academic workshop abroad, I was super excited and also totally clueless about the process. But the international office came to my help and guided me through every step of the ERASMUS scholarship.

The program started with a virtual kick-off session on 13th March at 5:00 PM CET where we got a briefing about how the program would look like, the planned schedule for the next one and a half month and also the expected deliverables. For the next one week we had various interactive and hands-on sessions every day from 17:00 – 19:00 CET covering topics such as serious games, agile methodology and scrum, VR, tools for game development and so on. We also got assigned to groups of 4 members to come up with 3 VR game ideas one per each category namely – generic fun game, serious game and serious game for health. Till the end of second week worked on and presented our 3 ideas to our fellow students, the lecturers and other experts. The third week was the face-to-face week at the IPCA Campus in Barcelos.

Quite in advance, I had decided to take a green mode of travel and also did some analysis on the most sustainable but feasible means to travel to Barcelos, Portugal which turned out to be by bus. Even though it was a 36 hrs journey, I went for it and made the bookings. I also booked my accommodation in a property located at walkable distance from the IPCA campus. However the owner of my Airbnb was so kind a person who would not only give me a ride to IPCA everyday on his way around in the town but also take me around the city and show places during free time and also give suggestions for places to visit there in Barcelos and also Porto. He also used to help me giving me shortcut routes in the locality which saved a lot of my time.

On the first day at IPCA all the teams were assigned the idea to work on selected by the experts from the choices that every team presented. The following days were dedicated to the planning, design and implementation of our VR Game – “Driving Lessons Gamified” which is a VR game that would help the players learn the road rules mainly for the theory tests before they first get to the wheel to start learning to drive. From my experience working in agile teams at, I could help the team with easier sprint planning and effort estimation. By the end of the week, we were able to develop the alpha version of the game and present it with a live working demo which was quite ahead in progress compared to the other projects and was well appreciated.

After the work hours in Barcelos, we the students got time to explore the small but beautiful city by foot and also hang out and bond well among ourselves. So, by the end of the physical week not only did we learn academically but also culturally and from the networking perspective. I made good friends with my fellow students from the program and after the week at IPCA we spent the weekend together in the nearby historic city of Porto. During our time in Porto, we went in for an Immersive Museum which was a novel and unheard experience to me personally. The “museum” was just an empty space in an old building which was part of the former port complex and there were no artifacts as such, rather it was the hologram projectors that created the magic by transforming the entire space – ceiling, walls and also the roof into an immersive experience. We also played the Escape Room game which was so much fun.

The weeks 4 to 6 were back on virtual mode again and we further developed the project, working individually based on the goals and tasks assigned and agreed beforehand. Only in cases of technical issues or scenarios where some help was required that we would get into meetings and resolve them together. Finally on the 28th of April we did the final presentation of our project and got the feedback which was mainly positive but with very few minor suggestions for overall improvement.

Overall, the experience of this Digital Games and VR BIP was truly amazing and I got to learn a lot – academically, professionally, culturally as well as from the people perspective through the networking. I would like to whole heartedly thank Hochschule Nordhausen for the opportunity to take part in this program and also a big shoutout to the HSN International Office for helping me through the entire process of this.