DIY

Getting started with your first electronic project

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Whether you are doing it for academic purposes or as a hobby, working on an electronic or hardware based project can be quite tricky. From initiating the plan to executing it with pin point accuracy, there are a lot of things that can go wrong as you venture into the world of circuits and microcontrollers. Thus, here are a few things you should consider before you start your journey.

Preparing the blueprint: Before starting the project, you need to set up a blueprint for your project. It should include all the necessary schematics of your project, its objective, the required tools and components, etc. Do your own research before planning out the design. Online resources like DIY videos or project documentations will help you a lot in this regard. Never rely on just one or two videos or papers. Go through multiple resources to make sure that you clearly understand what you are dealing with.

Purchasing tools and components: List down the names of components and tools you will be needing to build your project. There are a lot of online shops

that can cater to your requirements. If the project is on the high end or if it requires additional components that are not that widely used in Bangladesh, you might have to order them from overseas. However, it is unnecessary to go for a costly approach as this is your first time building such a project.

Taking precautions: Safety should

always be prioritised over everything else, especially if you are operating tools such as soldering irons, glue guns, high voltage power sources, etc. Exercise utmost caution while connecting your components. If you mess up your connections, like connecting the power source to the wrong terminals, your components will be damaged, often to the point where they will be rendered

useless. Ensure that you have extra components with you at all times so that if one component does not function properly, you can replace it with the extra one.

Coding: If you are using programmable microcontrollers, such as Arduino, or a Single Board Computer (SBC) like Raspberry Pi, you will need to be somewhat familiar with coding. Even if you copy the code from your resource material, you will still need to understand what it does and how it operates. Each microcontroller or SBC will come with its own IDE for you to code in. The syntax to be used depends on the language which is supported by the device. If you can acquire the basic knowledge of how the syntax works, the rest is just logic.

Doing test runs: This will help you determine the faults in your project and also think of improvements that can be made. Conduct multiple test runs with a variety of conditions if possible.

Given that it is your first time working on something like this, you do not need to worry about perfection. Keep on trying until you see your project work just the way you want it to. The more involved you become with electronics and your tools, the easier and more exciting it will get.


GAME REVIEW

NIGHT CALL

An impeccable visual novel, a disappointing investigation sim

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Many games can spend millions on creating photorealistic depictions of a place only for it to not *feel* like a real location. Night Call, however, does that quite cheaply with a 2D noir art style, fully-text conversations and a cast of wonderful characters.

Night Call is a game which puts you in a taxi driver's shoes during a serial killing spree. Having been attacked by the killer, you come back to work after recovering only to have a police detective blackmail you into getting info on the killer for her. With that, you get into Night Call's gameplay loop, which features the driving section and the investigating section. While driving, you use an overhead map of Paris to navigate through the city, while managing your money and fuel to make sure you don't get fired. Through the map, you get to choose your next passenger, gather info relating to the investigation at special locations, and like any regular taxi driver, fill up your gas tank.

This driving section plays out like a visual novel, and quite a competent one. The black-and-white noir style works well, and all the characters are beautifully drawn. Your main mode of gathering intel is through talking to your passengers, and
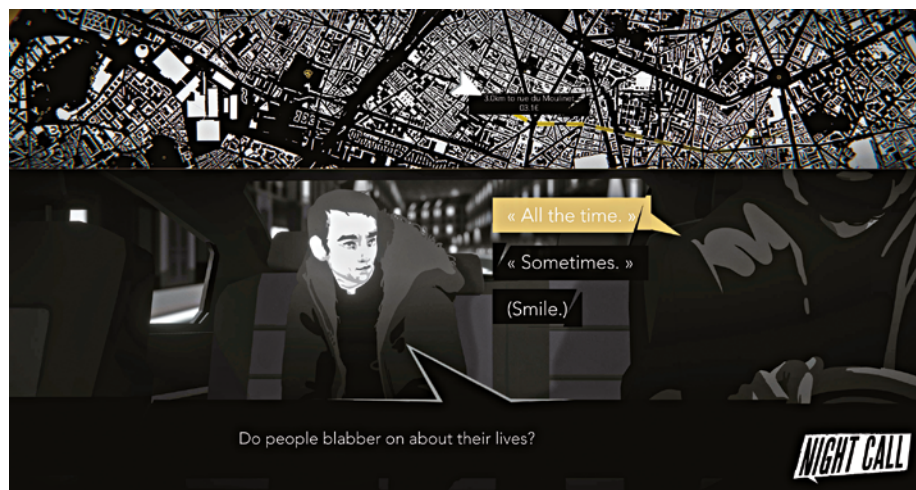
this is where the game shines. It features a cast of 70 different characters, each with their own personalities and needs. Some might want to ask your opinion on personal decisions, others might want a place to vent, and some might just want to ride in silence. My favourite was the journalist who I convinced to leave everything behind and get on a plane to follow the love of her life. Many of these characters are very well-written, and if you interact with them correctly you might also get new intel to help in your investigation. Of course, you don't know right

away who has something useful to say so you're always looking for ways to hold a conversation.

The characters, the music and the protagonist all work to give the game a distinctly Parisian feel. The music is low and subdued but matches the vibe of the cold Paris nights. Every now and then someone remarks about the state of Paris, about how things are changing, sometimes even venturing into the realm of racial and gender issues. When I encountered these situations, they were always tastefully executed. In addition, small

remarks about certain streets and areas really made me feel like I was right there, in the heart of Paris, complaining about the cold alongside my passengers.

You might have noticed how I haven't mentioned the second part of the gameplay loop, the investigation system, at all. That's because it sucks. There's no other way to describe it, since almost all you're doing in this section is looking at a board with all the suspects and clues you've found and...that's it. There's no 'and' because that is all you can do. Instead of going through the clues and intel you've found and critically analysing it you're mostly just guessing which one of the suspects is guilty, and that is deeply unsatisfying.

There are 3 different cases you can play through, but they all feature the same cast of 70 characters. During my first playthrough, which lasted a few hours, I guessed the killer incorrectly because of the aforementioned investigation system. Despite that, however, I found myself immediately starting a new playthrough. Not because I wanted to find the killer, but because I wanted to drive and interact with all the characters. That is what I recommend you do as well – treat the game like a visual novel. Now if you'll excuse me, I still have 23 characters left to pick up.