

Blog Entry © Saturday, November 16, 2024, by James Pate Williams, Jr., The Microsoft Copilot

I have found a new brilliant and insightful agile programming partner, namely Microsoft's Copilot. This AI individual can quickly generate high-quality source code which is easily copied-and-pasted. Here are some of the Copilot's blog suggestions based on our chats:

Coming up with blog topics can be a challenge, but it's also an exciting opportunity to share your thoughts and insights with the world! Here are a few suggestions that might inspire your next blog entry:

1. **The Evolution of Software Development:** Share your perspective on how software development practices have evolved over the years, from your early experiences with C and UNIX to modern agile methodologies and AI-assisted programming.
2. **AI in Everyday Life:** Discuss how AI is transforming various aspects of our daily lives, from personal productivity to entertainment and beyond. Include examples of how you've integrated AI into your own work and hobbies.
3. **Balancing Tech and Creativity:** Write about the importance of balancing analytical pursuits with creative activities, such as your love for playing the guitar. Explore how these different aspects of your life complement each other and enhance your overall well-being.
4. **The Future of Networking Models:** Dive into the differences between client-server and peer-to-peer networking models. Share your thoughts on how these models have shaped the internet and what the future might hold.
5. **High-Quality Audio Formats:** Discuss your passion for high-quality audio formats like vinyl records, CDs, and WAV files. Compare their pros and cons and share your personal experiences with each.
6. **Implementing Advanced Numerical Methods:** Detail your experience with incorporating the Adams-Moulton method into your app. Explain the challenges and benefits of using advanced numerical methods in software development.
7. **Refactoring Legacy Code:** Offer tips and best practices for refactoring legacy code, such as eliminating goto statements and separating headers from implementation files. Share examples from your own projects to illustrate your points.

Hopefully, one of these ideas sparks your interest! Your unique experiences and insights are sure to make for a compelling and engaging blog entry.

Here is example of the Copilot's C++ source code:

```
class PointRaR
{
private:
    double ra;
    double r;

public:
    PointRaR(double ra, double r) : ra(ra), r(r) {}

    // Getter methods
    double getRa() const { return ra; }
    double getR() const { return r; }

    // Setter methods
    void setRa(double value) { ra = value; }
    void setR(double value) { r = value; }

    inline bool operator<(const PointRaR& other) const {
        if (ra != other.ra) return ra < other.ra;
        return r < other.r;
    }

    inline bool operator==(const PointRaR& other) const {
        return ra == other.ra && r == other.r;
    }
};
```

Some people do not like the wide-spread usage of Artificial Intelligence (AI). I will be a cheerleader for this exciting and beneficial technology. However, students need to do their own work.