Hello from Heather Stephens

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Java in Education

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What brought me here?
We are Moved By Java and Want Young People to Feel the Same

Java is the language of the Art of the Possible
It encourages creative solutions, is relevant to the problems of the future, and creates opportunity

Java is the language of the Art of the Probable
It makes simple things simple, makes difficult things possible, and can be used to create anything

Java is the language of a Vibrant Community
It is a diverse, inclusive, energetic tribe of developers who feel respected, heard, and supported
Growing New Java Developers is Critical to Java’s Future

Our goal: We want the next generation of developers and educators to become evangelists of Java.

The problem: The next generation is not choosing Java. They perceive it as not modern, too complex, not fun, not inclusive, not listening.

Moving the needle requires:
1. Changing the perception by modernizing Java in the education sector
2. Simplifying the developer experience by making it easy to get started
3. Creating a delightful learning experience to enable teachers and the provider ecosystem to succeed
4. Building and fostering a community for students that is diverse, inclusive, supportive, and that “looks like them”
| Developer Experience | • Activation Energy required is too high. Getting started with “hello world” isn’t simple.  
• Knowing what to install isn’t trivial and many students work on chromebooks so cannot install anything.  
• Teachers are on IT managed machines which often dictates use of Java 8 and only the core JDK.  
• Negative feedback about `public static void main(String[] args)` and esoteric error messages.  
• The ecosystem of libraries, frameworks and tools is complex to navigate for new developers but necessary to relevant creation. |
| Learning Experience | • Advanced Java concepts, like OOP, are hard to grasp for young people with no coding experience.  
• Young people expect immediate, tangible results with a physical or visual component.  
• Examples of creative, relevant, fun, modern Java projects are not easily discovered.  
• It is hard for teachers to keep up with the pace of technology.  
• Primary and secondary teachers face a whole host of issues such as lack of training and funding.  
• University professors can be resistant to change. Industry can help move that needle by demanding colleges produce grads with experience on modern Java or any technology.  
• Broader Education industry is also in flux and necessitate change, such as alternatives to 4 years colleges. |
| Community | • The Python community is perceived as open, vibrant, and diverse by young people. Java is seen as the opposite.  
• Java doesn’t have a strong presence within the education ecosystem and associated conferences. |
| Perception | • Most of the Education System is on Java 8 feeding the perception that Java is too hard, irrelevant, and dying.  
• Python syntax is perceived as simple to get started, and it is seen as the language of modern problem solving with data.  
• Java is perceived as the language of legacy middleware, not of newer technology trends (AI/ML).  
• Kids, especially those from diverse backgrounds, cannot envision themselves as future Java developers.  
• When corporations sponsor education conferences for Java promotion, the booths and offerings have a staid, outdated feel. |