

How to become an Accredited Symbian Developer

March 21st, 2006

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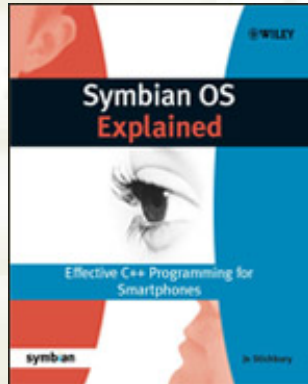
What am I going to talk about?

- Introduction
- The Accredited Symbian Developer (ASD) scheme and exam.
- FAQs.
- The exam format and some example questions.
- Why become accredited?
- The benefits - to you, the Symbian community and employers.
- Training and Curriculum.
- The Symbian Academy.
- Symbian OS Explained (and the Clangers).

I am not going to go into much technical detail.

Who am I?

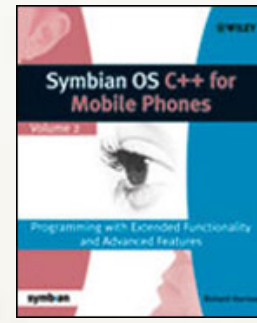
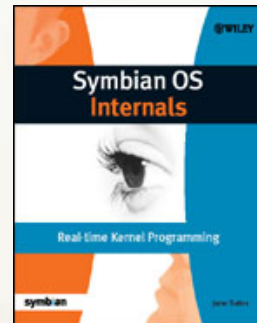
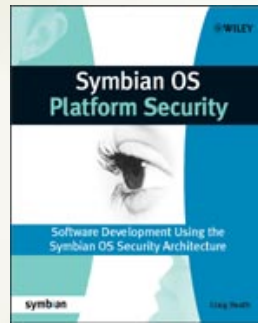
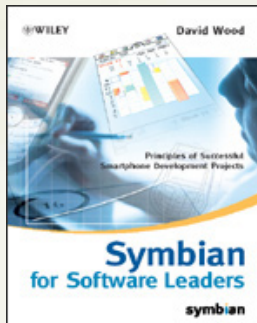
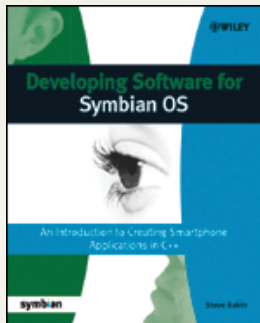
- Ex-Psion Software, Symbian and Sony Ericsson.
- Based in Vancouver, working in the Symbian ecosystem.



- Accredited Symbian Developer.
- Symbian Press author (“Symbian OS Explained”, published in 2004)
 - ...this presentation is on behalf of Symbian Press and is endorsed by Symbian, Majinate and Meme Education.
- Active online (e.g. Forum Nokia, NewLC and descriptors blogs).

Who is Symbian Press?

- Symbian Press is part of Symbian.
- Formed in 2001 as an “imprint” partnership with John Wiley Publishing.
- <http://www.symbian.com/developer/books/>
- 13 books published to date (plus translations to Japanese & Chinese)

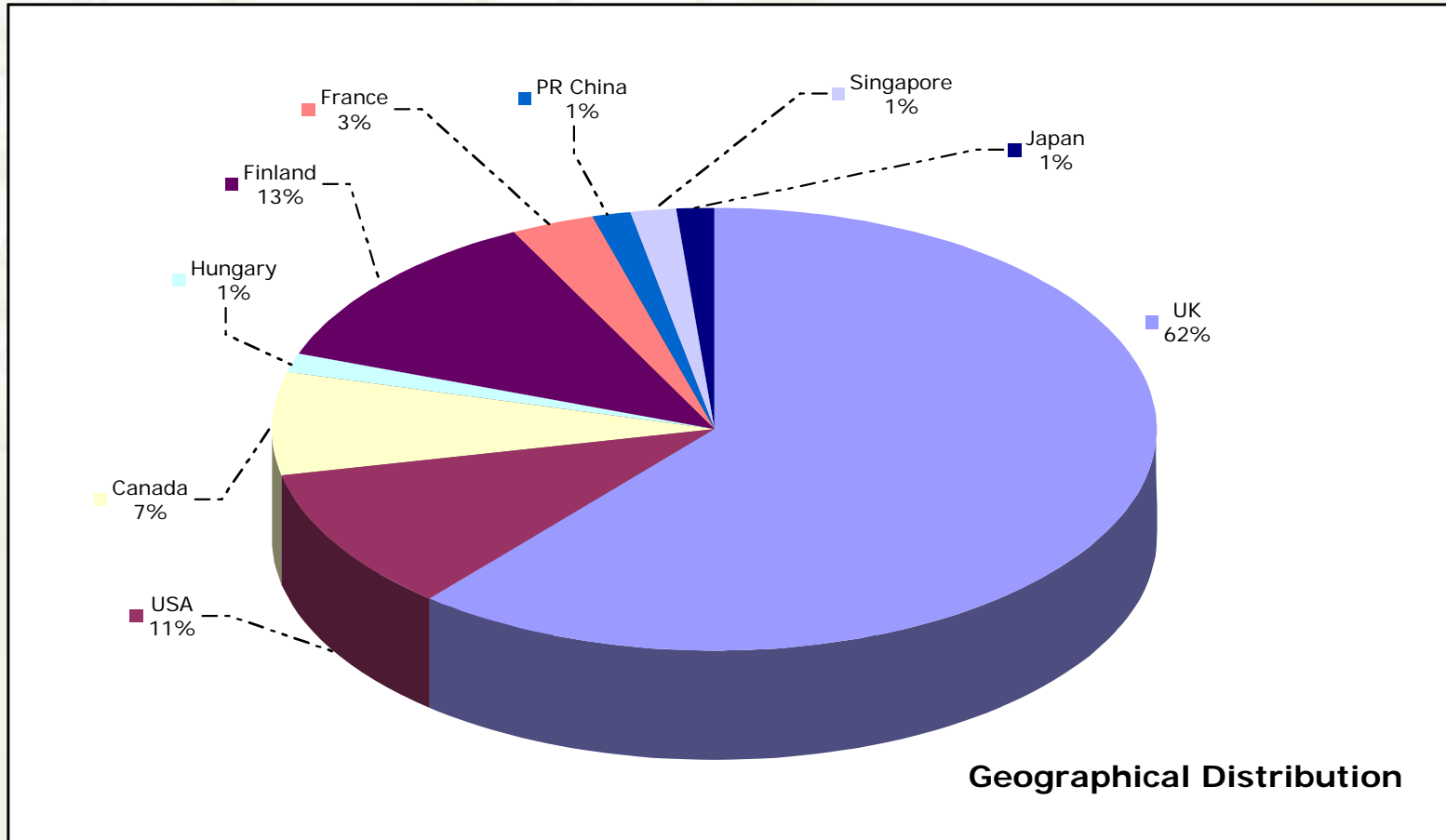


Who is Majinate?

- Majinate operates the Accredited Symbian Developer (ASD) scheme on behalf of Symbian.
- The scheme includes education and training, university outreach, and formal accreditation through examination.
- Majinate announced the ASD scheme in October 2005 in the UK and now runs the scheme through a worldwide network of partners.
- In North America, **Meme Education** is the ASD representative and offers accredited training and examination



Who is passing the exam?



How do I take the exam?

- Online multiple choice test (more details coming up).
 - Unsupervised mode (e.g. at home).
 - Supervised (e.g. at a test center or following training).
- The ASD certificate will reflect the mode in which the exam was taken.

How much does it cost?

- Introductory price of \$175 USD for an unsupervised exam.
- Majinate and Meme have kindly agreed a **25% discount** for anyone who signs up for the exam at this presentation and takes the exam within **28 days** (I'll give you a promo code to enter on the exam registration page).
- Different pricing system for a supervised exam.

When can I take the exam?

- You can take the unsupervised mode right now.
- Sign up with the Majinate local partner in your country for unsupervised mode (or enquire about where you can take the supervised exams).
 - Meme Education in North America
 - Symsource in Europe
 - SoftSpin in India
- Symbian and Meme Education will be at the Orange Partner Code Camp and will run the exams during that event (<http://www.orangepartner.com>)

Exam Details

What is the exam like?

- The exam runs inside your browser (you must have a live network connection throughout the exam).
- It's hosted by IKM "TechChek" an industry standard assessment tool.
- Your answers are collected by Majinate which builds a profile of your strengths and weaknesses.
- The results are returned to you with 24 hours
 - Pass or Fail
 - An optional profile of strengths and weaknesses can also be provided

How long does it take?

- You will take approximate 50 questions.
- It typically takes 75-90 minutes to complete the exam.

Exam Details continued

- ASD questions were set by Symbian OS developers who are expert in those areas.
- It was calibrated before roll-out by 100 developers of varying expertise, drawn from Symbian and Symbian Platinum Partners.

How does it work?

- Each question is multiple choice, consisting of 5 possible answers, up to 3 of which may be correct (25 possible combinations).
- Points are given for correct responses and deducted for incorrect ones, or failure to select correct ones.
- The higher the score for a question in a particular subject, the harder the next question on that subject presented.
- When a consistent level is reached, the exam stops asking questions on that subject.

Example Question 1

Which of the following are Majinate partners?

- Y** (A) SoftSpin
- N** (B) Microsoft
- Y** (C) Meme Education
- N** (D) Sun
- Y** (E) Symsource

Example Question 2

Which of the following statements are correct?

- Y** (A) Symbian OS evolved from a 32 bit OS called EPOC
- YY** (B) The creators of Symbian OS previously developed a 16 bit OS called SIBO
- N** (C) Steve Ballmer owns a phone powered by Symbian OS
- YYY** (D) The company which created Symbian OS also developed "Horace goes Skiing"
- NNN** (E) Symbian OS was developed by NASA

Example Question 3

Which of the following convert a descriptor to an integer?

- NN** (A) `TInt myInt = 5; TBuf<4> myBuf();`
`myBuf.Format(_L("%d"), myInt);`
- Y** (B) `TInt value = 0;`
`TLex lex(_L("54321"));`
`lex.Val(value);`
- NNN** (C) `TBuf<12> helloWorld(_L("Hello World"));`
`TInt helloSize = helloWorld.Size();`
- YYY** (D) `TTime today;`
`today.Parse(_L("21-Mar-2006"));`
- N** (E) `TInt myInt = 5;`
`TPckg<TInt> myBuf(myInt);`

Why is Symbian supporting developer accreditation?

To manage the competence of developers associated with the Platform as it grows, maintaining a recognizable high standard.

Some illuminating figures:

- At the end of 2005, 60 phone models from 10 Symbian OS licensees were shipping to more than 250 major network operators around the world (Symbian 2006)
- 58 million smartphones shipped world-wide (vs 5 million Microsoft) (Symbian 2006)
- Handango in March 05 revealed that 3 out of the 5 top phones were most popular for installing new software were powered by Symbian OS ("How Smartphones Work" 2005)
- A very conservative estimate of 3,000 Symbian OS C++ applications have been published (Symbian Press)
- There are approximately 50,000 subscribers to the Symbian developer newsletter (the SCN) (Symbian Press)
- Symbian OS is set to grow (making moves into the feature phone market - 450m market size in 2006) (Adobe/Strategy Analytics)

Why should I become an ASD?

- Because you can!
 - Approximate 70% pass rate (not just Symbian employees).
 - Symbian is maturing as a company and as an ecosystem - a strong support network and professional recognition is a part of this process.
 - But not all Symbian developers are equal and people are getting left behind:
 - *“Help me please, it’s urgent. My code is due tomorrow and I don’t understand Symbian.”*
 - Good developers want to differentiate themselves and gain the recognition for their hard earned experience.
 - We are the forerunners - we are at the beginning of something big and have the opportunity to show it!

What are the benefits of being an ASD?

- ASD is an industry recognized measure of Symbian OS competency (which employers can validate with the Majinate ASD Register).
- The ASD logos can be used on stationery and web sites:



- A uniquely numbered certificate.
- Exclusive discounts and invitations to participate in conferences, training sessions, etc.
- Symbian will keep ASDs informed of developments to Symbian OS if they wish to opt in to this service.



What are the benefits of the ASD scheme for employers?

- Potential employers can validate interview candidates who hold the ASD by confirming it with Majinate.
- The ASD exam can be used as part of (or as a replacement for) a technical interview.
- Employers can use the ASD exam to assess the skills of their development team – and organize training or outsourcing accordingly.

Do I have to have formal training?

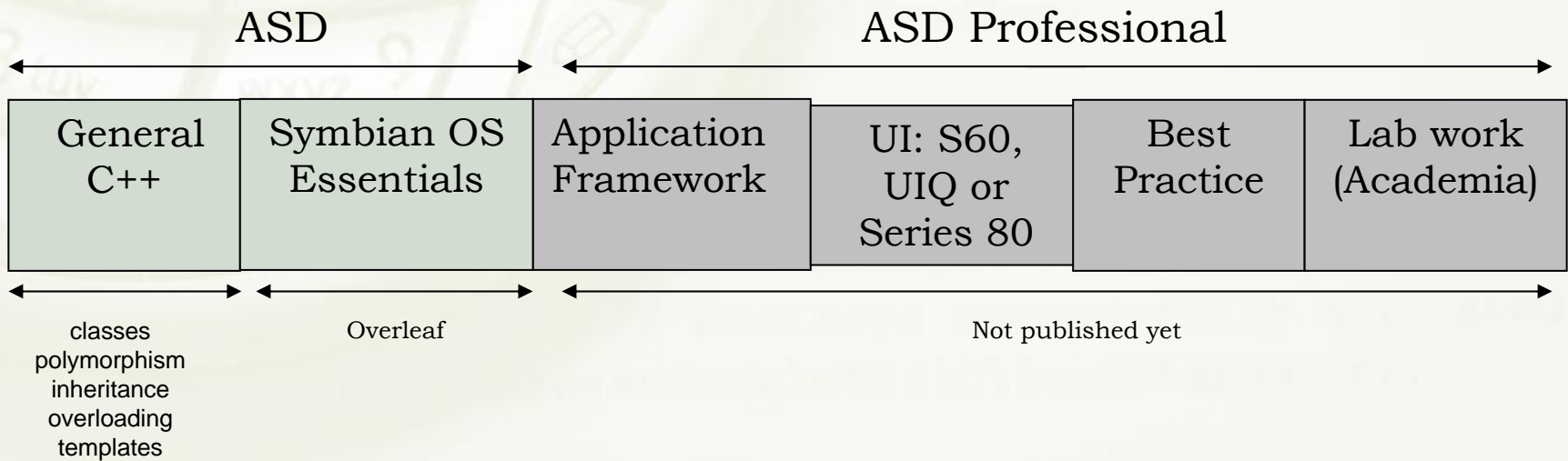
No. Anyone can take it.

The curriculum is based on the "**Symbian OS Essentials**" and "**Symbian OS Application Engine Development**" courses, but it is not mandatory to attend them.

From a novice Symbian developer with a good knowledge of C++, these are some of the paths to becoming an Accredited Symbian Developer:

- Complete a Symbian Academy "**Principles of Symbian OS**" university course.
- Attend Symbian OS training course(s) and have a good knowledge of the relevant Symbian Press literature.
- Have Symbian OS development experience and have a good knowledge of the relevant Symbian Press literature.

Objectives for Symbian OS Competence

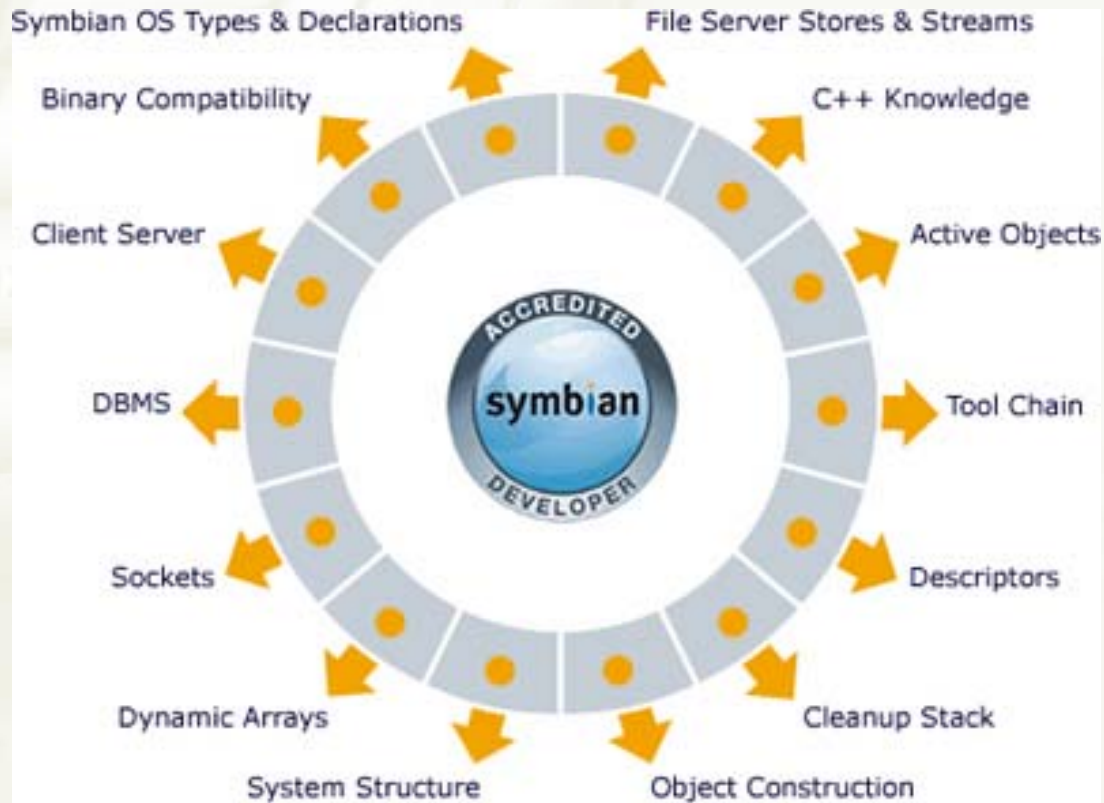


What do I need to know to pass the ASD exam?

The curriculum:

- **Class types**
- **Descriptors** and dynamic containers
- **Leaves and the cleanup stack, two-phase construction**
- Active objects
- Tool chain
- System structure (threads, processes, memory management)
- File server & streams
- **Client-Server**
- DBMS
- Sockets
- Binary compatibility

The ASD Curriculum



Nothing about device drivers or UI frameworks like Uikon, Avkon or UIQ

How to succeed

- Make sure you have enough uninterrupted time set aside for the exam.
- Be comfortable with the curriculum by reading the supporting Symbian Press material.
- Understand that you can't skip and go back later to a question.
- Make good progress through the exam – sometimes it's better to skip a question on a topic you're not so familiar with than to spend a lot of time and then guess a wrong answer...
- Accept that the questions will be quite hard because the system is designed to test you to your maximum level...
 - ...everyone comes away feeling that they've been well tested!

Does the ASD exam test knowledge of Symbian OS 9.1?

Not right now ...

- The exam is designed to test skills needed to work with handsets in the current market - currently, this includes Symbian OS v6, v7 and v8
- Some questions specific to Symbian OS v9 will be added as phones based on it are released to market.
- The ASD qualification is valid for a minimum of 18 months so you would not be re-examined until 2008 at the earliest, if at all.
- The question database is constantly being revised.

What is Symbian Academy?

- The umbrella term for Symbian's internal and external training provision.
- Incorporates both professional training and academia.
- Ensures that the skills taught are consistent to promote good software development on Symbian OS.
- Symbian Academy has developed a curriculum and course materials (which the Accredited Symbian Developer qualification tests).
- The Academy uses this material and the exam to provide Industry Recognized measurement of these skills.
- Formally launches in June 2006.
- <http://www.symbian.com/developer/academy/>

Symbian OS Explained...shameless self-promotion!

- Started work in August 2003 – MS went to Wiley in June 2004.
- Published in October 2004 at the Smartphone Show.
- 21 chapters each concentrating on a topic such descriptors, active objects, client-server etc.
- Based on wisdom distilled from Symbian's internal Lotus Notes discussion databases and the developers I worked with at Psion Software and Symbian.
- Reviewed by Symbian staff twice over for QA purposes!
(There are still errata, of course, which are listed on my web site <http://www.whoshavesthebarber.com>)
- It's a recommended text for the ASD exam.

I have just received a contract from Wiley to co-author a Symbian Press ASD Primer book for exam candidates.

My Co-Authors



The Clangers

Thank you for your attention!

