

Mobile Development Primer

The popularity of mobile, particularly the iPhone, has resulted in many individuals and companies approaching me with ideas for mobile development. Some people aren't from the mobile ecosystem or even from a software development background. These people ask how they can go about developing a mobile idea. These people often ask the wrong questions, assume the wrong things and generally need a lot of hand-holding to get them to a stage where I can design and develop their mobile application. Often, these people have previously contacted other mobile developers but have come away disillusioned and disappointed.

These tips will hopefully help you see mobile development services from a developer's point of view.

Know what you want doing

A developer will ideally need a specification for what you want doing. Without a specification you are opening yourself (and the developer) to problems due to misunderstandings. If a specification isn't available then you will probably have to ask the developer to create one as an initial task. Even if a specification isn't initially available, before you approach a developer you should have a bullet point list of things that you want the application to do.

Know what you want to do is possible

Mobile is technically complex. Almost all non-trivial projects need some kind of research to work out what's possible on what platform and assess the areas of most risk. When a developer is asked to quote on a complex project, they can do one of several things:

- Fully research the project. Only large software houses with large overheads and fees can afford to do this.
- Assume it's all possible, leave the risk with you without telling you and only let you know when they eventually reach something that's not possible.
- Go quiet and lose interest in quoting for the project because too many things are uncertain without significant time spent on research.
- Offer to do a feasibility study for a small fee.

I usually take the fourth route. Feasibility studies are a great way for the developer and client to get to know one another and build trust.

Know what platforms you want developing

Too many people approach me asking for an application to work on 'All mobile phones'. This just isn't possible. Work out the exact platforms and/or specific phones. Also, within platforms, know what versions you need to support. Supporting older ones probably won't be economic.

Here's a list of what I would ask for if I were commissioning an application to run on recent (last few years') phones:

- Symbian - S60 3rd Edition and 5th Edition
- iPhone - All
- Android - All
- Windows Mobile - 5.0 and later. Windows Mobile Standard (non-touch) and Professional (touch)
- Java ME - MIDP 2
- BlackBerry - 4.2 and later
- Web - XHTML and/or WAP

Prove you can pay

Most mobile developers will have had problems with bad payers in the past. Explain how the project will be funded. Offer to provide a purchase order that commits you to the work.

Assuming you have chosen a developer, here are some tips on how to go about proceeding:

Agree payment terms

There are generally two ways to pay for mobile development. *Fixed price* and *Time and Materials* (T&M). Fixed price may seem advantageous but the problems start to happen when the application veers away from the original specification (as it always does!). Conversely, Time and Materials on a daily or hourly rate might be seen as a way for the developer to charge as much as they like.

I prefer a mix between fixed price and T&M. I quote how long it will take to develop and give my daily rate. If the project takes more time then that is my risk. Incidentally, I also usually work outside normal hours to meet the agreed schedule. If the client changes the specification then they know the daily rate that will be applied.

Know what will be delivered when

Beware of developers that take on a project and say they will deliver in several months' time. How will you know what is being developed is actually what you wanted? A better approach is to get the developer to create a plan with weekly or fortnightly deliveries so that you can see what's being done as work progresses. This way you can intervene before it's too late. Also, it allows payment to the developer be phased.

Agree a contract

Have yourself or the developer draw up a contract. Ensure it includes:

- Payment terms
- What is to be delivered when
- Who owns the source code
- Confidentiality terms (if not already in an non disclosure agreement)

About the Author

Simon Judge is a freelance mobile application developer in the UK with over 20 years commercial IT experience. He has been working in mobile since 1996 when the Windows CE 1.0 beta (Pegasus) appeared. Since then he have worked on Windows Mobile, Symbian OS, S60, UIQ, Java ME, BlackBerry, Android and iPhone. He is an Accredited Symbian Developer.

Simon provides advice, feasibility studies and design/implement applications that add functionality to mobile devices. You can find out more about his consultancy and development services at SimonJudge.com. You can read his blog at mobilephonedevlopment.com.