

intelliarts

Intelliarts Company Profile

Table of Contents

1. Overview.....	5
1.1. Mission/Values.....	5
2. Services.....	6
2.1. Consulting.....	6
2.2. Software Development.....	6
2.3. Remote Administration.....	7
2.4. System Integration.....	7
2.5. Software Testing.....	7
3. Solutions.....	8
3.1. Enterprise Intranet Applications.....	8
3.2. Embedded Java Systems.....	8
3.3. Digital Publishing.....	8
4. How We Work.....	9
4.1. Resources.....	9
4.2. Methodology.....	9
4.3. Infrastructure.....	9
4.4. Communication.....	10
4.5. Quality.....	10
4.6. Pricing.....	11
5. Team Expertise.....	12
5.1. General Skills.....	12
5.2. Project/Configuration Management.....	12
5.3. Java Development.....	12
5.4. Web Development.....	12
5.5. XML Development.....	13
5.6. Windows Development.....	13

1. Overview

Intelliarts Ltd. is a custom software development and consulting company, with a research and development centre in Lviv, Ukraine and a representative office in Munich, Germany.

Since company establishment in 1999, we have been delivering first-class software development services to our customers worldwide. Intelliarts portfolio includes over 100 successfully completed software development and consulting projects for more than 20 customers from Europe and United States.

We are focusing on providing high-quality and cost-effective software solutions and building long-term relationships with our customers to help them gain exceptional benefits from using Intelliarts' outsourcing services.

1.1. Mission/Values

Intelliarts' mission is:

- to provide high-quality IT consulting services and effective software solutions to our customers;
- to provide our with an employees inviting working environment and great opportunities for professional and career growth;
- to build long term and fruitful relationships with our customers and partners.

Mission is based on the following values:

1.1.1. Customer success

At Intelliarts we realize that everything we do is a significant part of the customers' success. We aim to make our services correspond to customer's requirements and achieve results exceed their expectations.

1.1.2. Top-notch quality

We are placing high emphasis on quality of the services we provide. Quality assurance is an integral part of Intelliarts' software development process which goes throughout the whole project life cycle.

1.1.3. Knowledge management

We are paying special attention and working hard to collect, organize, analyze and reuse the best practices from our software development experience in all its aspects: tools, technologies, processes.

1.1.4. Prompt communication

Effective communication is the backbone of any software project's success. We maintain a 24-hours feedback policy, which ensures that any incoming request or question is answered within 24 hours.

1.1.5. Fabulous teamwork

We've been building and constantly improving a "jelling" environment, which encourages the rising of "jelled" teams – well knit teams with a strong sense of identity, enjoyment of the work process and sensational productivity.

2. Services

Intelliarts provides custom software development and consultancy services. So whether you want to outsource software development or add new functionality to your information systems or products with the help of third-party applications or need consulting on using the best technologies to improve your business, we have the necessary skills and knowledge to help you achieve your goals.

We also provide supplementary services like software testing, software system integration and remote administration. We provide the full software development and integrated solution cycle from requirements analysis to quality assurance and deployment.

2.1. Consulting

Intelliarts' consulting services are focused on advising customers of the best ways of using information technologies to meet their business objectives. We will help you analyze your business processes, evaluate third-party IT proposals, perform product and/or technologies evaluation and selection, create software requirements specifications, design and deploy successful solutions.

2.1.1. Technology

Under Intelliarts technology consultancy services we help our customers to choose relevant technologies, platforms and products, build optimal system architecture and create efficient solutions in shepres where we have gained expert-level knowledge.

2.1.2. Project Management

Intelliarts project management consultancy services are focused on helping other teams to establish reliable development environment and organize efficient software development process. Company consultants share company experience and knowledge in project management, software development methodologies and techniques.

2.1.3. Performance Optimization

When you encounter performance issues in your IT environment it doesn't always mean that IT infrastructure has to be partially rebuilt or repalced. It is often enough to remove one or few "bottlenecks" to turn the system into the normal operation mode. With Intelliarts performance optimization services we help our customers to analyze their information systems, identify and remove potential gridlocks.

2.2. Software Development

With Intelliarts custom software development services our clients outsource software construction activities, when their business doesn't assume own software development facilities, or extend capabilities of an existing software development team reducing software development costs.

The company provides complete range of software development activities including project management, business modeling, requirements analysis, system architecture design, software construction, software testing and maintenance.

Intelliarts approach to custom software development is very flexible:

- customer may provide a detailed specification as well as come only with an idea of a product and we will define requirements together;
- customer may utilize company software development facilities to create a solution from scratch or to improve or extend an existing solution;
- we can perform a complete software development cycle or provide particular engineering services customer needs at some project phase, e.g. testing only;
- we can integrate into the customer's development environment and adopt the customer's process and rules or let clients choose one of the methodologies we are familiar with suitable for both parties.

Having entrusted us with the software development be sure to gain the best combination of quality, reliability and rapidity. We are confident that working with us you will have the most positive impressions.

2.3. Remote Administration

Intelliarts' remote administration service includes a complete range of system administration activities: server deployment, system monitoring, troubleshooting, security threats detection, installing software updates, performing system backups and much more.

Working on a web product we help our customers to choose and evaluate hosting provider services, setup dedicated servers (FreeBSD, Linux), install and configure all required backend software including database servers, applications servers and various Internet services, deploy applications and have been supporting the productions environment for the whole product life cycle.

On customers request we also fulfil their system administration daily needs. These tasks include but not limited to servers installation and configuration, system/service-level security audit and hardening, setup of firewalls, antispam and antivirus solutions, performing system and software upgrades, applying security patches, performing system backup.

Intelliarts remote administration service is a valuable add-on to software development and consulting services and great alternative to the hiring on-site system administrator.

2.4. System Integration

Software systems integration service helps our customers extend capabilities of their information systems or products with functions or services provided by third-party applications. For example, you may want:

2.4.1. Information Services

Corporate information systems quite often require importing data from various either free or protected external data sources. There might be need to import information from a weather forecast or on-line stock quotes web service or exchange data with on-line banking system.

2.4.2. Smart Devices

Nowadays there are plenty of various smart hardware which can be used for accessing to countless information-centric services. We implemented multiple solutions which deliver content from different services to the home media centres, TV-set top boxes, handhelds and others smart devices.

2.4.3. Applications

Third-party applications integration is often used to extend capabilities of the existing information system with features available in the professional tools/products. For example, a powerful desktop content authoring tool might be integrated into the corporate content management system instead of the simple built-in editor.

Intelliarts experts perform the full integrated solution development cycle: systems analysis to investigate integration possibilities, integration components implementation and testing of the integrated solution.

2.5. Software Testing

The main purpose of the Testing Service is to provide customer with high quality of testing and verification, to prevent incorrect dependencies between functional approaches developed and further possible risks in product quality.

Testing Service is a constructive part of Quality Assurance process of Intelliarts Inc. Widely used practice of the test cases creation takes place in Testing Service too. There are two possible ways of this process:

- test cases could be provided by customer
- test cases could be created by us

All created test cases are saved in test case repository and with new changes appeared in application developed, test cases should be updated as well. Depending on environment and functional requirements of the application developed, corresponded types of testing plan to be used. Smoke, functional, regression and other types of testing are practiced to be used in this part of QA process. As a result of work done, after finishing testing process QA team sends status report regarding all found issues based on their priority and type.

3. Solutions

Intelliarts' portfolio includes successfully completed projects in various vertical markets. However, there is a number of domain/technology areas where we have gained expert-level knowledge and provide technology consulting and training services.

3.1. Enterprise Intranet Applications

Enterprise solutions team is working on design, construction and maintenance of the enterprise-level Intranet applications. Usually team engineers create customizable products or platforms focused on using in large organizations. We have successfully developed several document management systems, a content management system and applications for particular domain areas, e.g. financial analysis or ABS market.

Solutions developed by the team are mostly targeted on J2EE platform and use three-tier architecture. Enterprise database servers like Oracle, MS SQL or PostgreSQL are mainly used at the back end. In some cases a native XML database, archive or directory server or other specialized tool can be used together with the database server. Middleware is usually business logic components deployed to the most popular J2EE servers like Apache Tomcat, IBM WebSphere, BEA WebLogic or JBoss. Typical front ends are traditional thin web clients, AJAX-based rich web applications, desktop applications. The most popular interface for the third-party integrations and extensions is WSDL/SOAP web services.

Team engineers have solid background in many enterprise Java technologies (EJB, JAAS, JMS etc) and frameworks (Hibernate, Spring, JBoss Seam etc). The team performs the complete life cycle of Java enterprise development from system analysis, design, implementation and testing to production environment optimization, maintenance and support.

3.2. Embedded Java Systems

The embedded systems team focuses on research and development of applications and services in automotive telematics and home automation areas. Primary development platform is Java/OSGi.

The automotive telematics solutions we've developed include navigation systems, various location-based services, entertainment applications and other in-vehicle software. We have also performed required research and prototyping under the development of the open standard for interoperability of service providers and end users in automotive telematics networks.

Smart home software includes complex solutions to control home appliances, lighting and air conditioning systems, video security services and others. We have created multiple applications which provide home management functions at variety of terminals, desktop and mobile computers, cellular and DECT phones, TV-set top boxes and others.

In 2003 company engineers performed the necessary research and development activities to create a number of reference implementations of RFCs produced by OSGi Alliance Core Platform and Vehicle expert groups.

3.3. Digital Publishing

Digital publishing solutions team is specialized in design, development and integration of the single source publishing and variable data printing solutions. In both cases we intensively utilize digital publishing XML applications, like DITA, Docbook, XSL-FO and others.

When business requires producing large amounts of documentation in various output formats and/or in multiple languages a single source publishing solution may significantly decrease documentation delivery period and reduce documentation development costs.

Variable data printing assumes producing high-quality publishing products using data from web, databases or any other information source. Variable data printing is a great chance to improve any information-centric business delivering to end users more relevant, personalized information with better look and feel.

Team engineers are also committing to the DITA Open Toolkit open source project – a set of Java-based tools for processing OASIS DITA documents into deliverable formats, and sharing their knowledge with many XML technology communities.

4. How We Work

At Intelliarts we pay much attention to ensuring the best conditions for software development regardless of the collaboration model used. Whether it's outsourcing, an integrated team collaboration or offshore development, we assure the use of the most effective development techniques and methodologies and a 24-hour feedback policy which along with an extensive use of automation allow utilizing time and resources in the most productive way. At the same time we provide flexibility by adopting any methodology or development infrastructure suggested by our customer providing it doesn't disaccord with the project's needs and by shifting the team working schedule in case of a crucial stage of project development.

4.1. Resources

We offer our customers various collaboration models such as offshore development centre and project basis model.sec

4.1.1. Offshore Development Centre

Offshore development centre model means establishing a dedicated engineering team which works as a remote IT department of the customer's organization.

With Intelliarts offshore development centre service customers acquire an excellent software development team with a first-class infrastructure, effective software development processes and concentrate on management decisions and reaching business goals.

In case you already have a team working on one or more projects and you want to extend your software development capabilities we can offer to build an integrated team. Using modern technologies (virtual private networks, instant messaging, voice over IP) makes it easy to reach seamless teams integration.

4.1.2. Project Basis Model

Project basis model is simplest outsourcing model which assumes the development of a project or a part of the project according to the incoming requirements.

Using this model allow customers to increase efficiency, easily extend company resources, quickly start new projects, reduce software development and maintenance costs etc.

4.2. Methodology

At Intelliarts we do not stick to any particular software development process or methodology. We realize that there is no process which is suitable for all projects. We prefer individual approach to every project. The team can easily adopt any methodology suggested or being used by the customer.

We are familiar with all the most popular software development methodologies like unified process, extreme programming, SCRUM and others. If the customer doesn't have any preferred process we work together to choose the one which is the most convenient for both parties and the most efficient for a particular project.

Mainly we incline to using agile methodology rather than a formal one. Using a lightweight process allows us to start the project quickly, slightly increment product functions within each 2-4 weeks iteration, quickly handle requirements changes and much more. All those suit the best for goal-driven projects.

However there are a lot of cases when the agile approach can not be used for one or several reasons. Then we often use the Unified Process (UP) approach. The main advantage of the UP is that we can tune and make the process as heavy as we need for a particular project.

Even within more formal processes with a significant amount of documentation produced we often use various agile techniques like test-driven development, continuous integration, refactoring and so on.

4.3. Infrastructure

We supply our developers with high-performance workstations and the best available development tools. Company server pool includes network servers, servers for company service applications and dedicated servers for various project purposes. Internet access has main and backup channels.

Intelliarts development infrastructure includes tools for all configuration management activities including version control, issue tracking, time tracking, knowledge management, build automation and so on. We can work independently on our infrastructure, as well as within the customer's infrastructure connecting

via VPN or build a mixed environment when some facilities are deployed at the customer's premises and others in our local development centre.

At Intelliarts we pay special attention to the routine tasks automation. This practice extremely reduces development time and increases the quality of services we provide. Company development infrastructure intensively uses automation for getting nightly builds, deployment, delivery, backup and other tasks.

4.4. Communication

Effective communication is the backbone of any software project's success. This is especially important for distributed teams. Effective use of communication ensures that all members of the development and management teams have the same clear understanding of the project's peculiarities during the whole process of development and that no time is lost due to misunderstandings or unnecessary investigation. At Intelliarts we maintain a 24-hours feedback policy, which ensures that any incoming request or question is answered as soon as possible but not later than 24 hours. This allows our customers to be on the same page with the development team during all phases of the project development.

To make communication more efficient at critical project stages we are able to accommodate time zone difference shifting team schedule, to increase the amount of time remote and local teams are working together.

Intelliarts engineers are available via e-mail, instant messaging, VoIP and phone. The most common communication use cases are briefly described below.

4.4.1. Workshops/Trainings

In case of long-term, complex projects remote communication might not be enough. We find it useful conducting project workshops in the beginning and near to the end of a project.

Inception phase workshop is used to give developers a better understanding of the project goal, clearly define requirements and establish relations between remote and local team members. Initial workshop might include a training to get the team familiar with the domain or product. In the transition phase on-site workshop decreases the amount of time needed to put the implemented solution into the

4.4.2. Weekly Conferences

Usually once a week we have project status conference calls. Before the call local team project manager or a team leader sends a status report to the customer. On the call parties discuss issues that arose during the previous week and plans for the next week. After the call meeting minutes are sent to all team members via e-mail.

4.4.3. Daily Operations

In our daily work developers use e-mail, IM and VoIP services to clarify project requirements, discuss architecture and design solutions, report about possible risks. We often use web meetings services, like a WebEx, to gain a better understanding when discussing complex things.

4.5. Quality

Quality assurance is an integral part of Intelliarts' software development process, which goes throughout the whole project life cycle. Once initial requirements are defined QA team starts test plan creation and after that QA engineers fall on test scenarios which is completed by test cases created with purpose to be used in further testing and verification processes. Such approach allows QA engineers to start testing from very early builds.

Developers also commit to the QA process, covering most parts of the project with unit tests. Using continuous integration practice makes us sure that project source is always in the actual state. Build server identifies and reports any build failures on every code change committed to the version control. Once a day the daily build is performed. If it has passed successfully, build artefacts go to the QA team for testing. Depends on the requirements developed and included in build appropriate predefined test cases are used for build testing. Also, QA team pays attention to types of testing which should be performed for testing defined requirements of the build. QA engineers go through the all test cases and log every found issue into the issue tracking system. All issues and feature requests included in issue tracking system are prioritized based on their importance and critical state. To minimize possible risks

QA manager reports about all critical/important issues to the responsible person, it could be Project Manager or Project Leader.

At the end of each project QA team performs general regression testing of the all application with all functional test cases created before and used during functional testing. When all functional test cases are passed, verification process is finished and as a result is gotten high quality of the project - application can be reviewed by customers for the end acceptance testing performed by their side.

4.6. Pricing

Intelliarts adheres to a flexible pricing policy. We offer various pricing models such as fixed price, time and material, body leasing and their combinations.

4.6.1. Fixed Price

Fixed price model is suitable for projects with a well defined scope, requirements and schedules. This model means that the customer pays a pre-negotiated fixed price for project development. We usually use it for simple, short-term projects, e.g. pilot project which allow the customers to evaluate our team work.

4.6.2. Time and Material

Time and material model is often the only suitable option when project scope, requirements and development plans are tough to define at early projects stages. Choosing this model the customer pays only for the hours spent working on the project.

4.6.3. Body Leasing

Body leasing model is a special case of the time and material model adapted to middle to long-term projects being developed under the offshore development centre collaboration model. Payments are made on a monthly basis according to the previously negotiated monthly rate.

4.6.4. Mixed Models

Although pricing models described above are suitable in most cases, using combined pricing models is also very popular.

Fixed Price + Time and Material - the major part of project development is performed under a fixed price model. After the project is completed and goes to production, support is performed under a time and material model.

Body Leasing + Fixed Price/Time and Materials - while the project is being developed by a dedicated team under a body leasing model, various tasks out of mainstream development may pop up (graphics design, system administration). These tasks are billed under a fixed price or time and material model.

5. Team Expertise

5.1. General Skills

Operating Systems

Linux, Windows, MacOS, OS/2, Solaris

Programming Languages

Java, Python, JavaScript, C/C++, C#, Object Pascal (Delphi)

Network Protocols

SOAP/WSDL web services, HTTP/HTTPS, IMAP4/POP3/SMTP, LDAP, TCP/IP

Databases

Oracle (PL/SQL), PostgreSQL, MySQL, MS SQL, SQLite

5.2. Project/Configuration Management

Issue Tracking Systems

Bugzilla, Atlassian JIRA, Rational ClearQuest

Build/Continuous Integration Tools

Apache Ant, Apache Maven, AntHill, Cruise Control, JetBrains TeamCity

Version Control Systems

CVS, Rational ClearCase, Microsoft SourceSafe, Subversion

Software Design Methods/Technologies

AOP, GoF patterns, GRASP, J2EE patterns, UML

Software Development Methodologies/Processes

Agile Modeling, Rational Unified Process, Extreme Programming, SCRUM

5.3. Java Development

Java Platforms

J2ME, J2SE, J2EE, OSGi, Google Android, Eclipse RCP

J2SE Libraries/Technologies

AWT, SWT, Swing, Java Web Start, JAAS, JDBC, JNDI, JNI, RMI

J2EE Libraries/Technologies

EJB, JMS, JSP/Servlets, JSF, Hibernate/JPA, Portlets

J2EE Application Servers

Apache Tomcat, IBM WebSphere, JBoss, GlassFish, BEA WebLogic

Other

Groovy, JavaFX, JRuby, AspectJ

5.4. Web Development

Web Frameworks

Struts/Tiles, Spring, Echo2, GWT, ExtJS, jQuery

Web Technologies

AJAX, CSS, HTML/XHTML, JavaScript

5.5. XML Development

XML Technologies

XPath, XQuery, XUpdate, XSLT 1.0/2.0, XML design patterns

XML Tools

Apache Xerces, Apache Xalan, MSXML, Saxonica Saxon, FOP, Antenna House XSL Formatter, RenderX XEP

Publishing XML Applications

DITA, Docbook, ODF, OpenXML, SVG, XHTML, XSL-FO

XML Authoring Tools

Altova XML Spy, Adobe FrameMaker, ArborText Epic, PTC XMetal, XMLmind XML editor

Native XML Databases

Apache Xindice, X-Hive XML Applications SyncML, UIML, XUL

5.6. Windows Development

Development Libraries

ATL, MFC, OWL, STL, VCL

Windows Technologies

.NET, ActiveX, COM, DCOM, MAPI, OLE

Data Access Technologies

ADO, ODBC