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Executive Summary

1.1 Project Overview

Undeniably technology is advancing very fast nowadays and it seems like this pace will not slow down. Various beautiful applications are being built by developers around the world and those applications may be complex or easy depending on the ones who create and their intentions.

On this context the problem is not how fast technology is growing and how easy our developer tools are becoming for us to build a software but the problem is to harmonize the rhythm of our technology development community with the ability to approach different kind of users independently of their abilities to use software.

We want to really enhance the quality of their life and not just help them get addicted with our application.

Looking from this perspective we will develop an application which will aid traditional professionals or other simple trade jobs to just get connected in a meaningful platform.

Initially the project is intended to be built only in android platform.

The back end services of the android clients will use Spring Technologies.

The project focus is to make the platform a useful tool in the hands of the craftsmen and consequently providing for them a network of possibilities in the era of technology.

1.2 Purpose and Scope of this Specification

The purpose of the project is to create a meaningful platform regarding interactions of traditional professionals with their clients. The platform will provide a place for simple trade jobs deals. This is potentially useful for people finding it hard to increase awareness on their offering services or people who need a particular customized service for their needs.

The purpose of this specification is to clarify different type of requirements developed and engineered by the team.

This document addresses requirements with respect to real life operations:

- Functional requirements
- Non Functional Requirements
- Domain Requirements

This document doesn't address requirements dealing with legislative or business contracts regarding Financial Institutions

(Example: Relationship with Secondary Level Commercial Banks)

Product/Service Description

Studying the nature of the service one of the main factors which can influence the continuous activity in providing this platform is the ability to reach clients in a meaningful way.

The clients are traditional craftsmen mostly. For a long period time in their life such craftsmen have practiced traditional way of spreading the word regarding their service.

Ability to change their mentality not only for the sake of technology but because our approach can be very productive and at the same time tradition conserving is going to be a challenge on real life application.

One of the main reasons to deal with such kind of platform is to make aware each other of the work they are doing or at least make service seekers aware that such craftsmen exist in the city.

2.1 Product Context

There are various platforms operating in similar market.

Other platforms are similar only regarding the market where they operate but none of the platform matches the style of our product.

In purpose each platform connects. Regarding style of operation they are very different.

Our product is independent only in inner operations but dependent on payment from other financial institutions.

2.2 User Characteristics

User characteristics are distinguished by each user activity inside the platform.

This means that they can take more than one logical role during their activity inside the platform if they desired.

At the beginning when registered and logged in they are all visitors of the platform.

The profiles are divided in this way to make an understanding on the possible activity routes a user can take when he is using the platform.

- Job Giver Profile
 1. Every Person
 2. Personal Details
 3. Subscription necessary to become one
- Service Giver Profile
 1. Craftsmen
 2. Personal Details
 3. Subscription necessary to become one
- Job Seeker Profile
 1. Craftsmen
 2. Personal Details
 3. No Subscription necessary to become one
- Service Seeker Profile
 1. Every Person
 2. Personal Details
 3. No Subscription necessary to become one

a) Job Giver Profile Description

The user takes this role at the moment when he has bought a particular subscription which gives him permission to post jobs in the platform.

He can manage a restricted posted jobs of his own.

The user in this role is able to approve or deny the applications delivered by job seekers.

Finally if he wishes he can assess the interaction with the person which he has approved the deal.

b) Service Giver Profile Description

The user takes this role at the moment when he has bought a particular subscription which gives him permission to post services in the platform.

He can manage a restricted number of service post as stated in the subscription.

The user in this role is able to approve or deny the orders requested by service seekers.

Finally if he wishes he can assess the interaction with the person which he has approved the order.

c) Job Seeker Profile Description

The user takes this role at the moment when he applies for a job.

He doesn't need a subscription for his ability to apply for jobs.

In this role he should be careful in his applications because there is a limited number of applications he can do in a particular time (example 24 hours)

d) Service Seeker Profile Description

The user takes this role at the moment when he orders a service.

He doesn't need a subscription for his ability to order a service.

In this role he should be careful in his the orders he requests because there is a limited number of order requests he can make in a particular time (example 24 hours)

2.3 Assumptions

- Assume payments between “Job Giver” and “Job Seeker” or between “Service Giver” and “Service Seeker” are done without system interference but fully on their responsibility
- Assume payments between stakeholders involved in an interaction are done on their own. Meaning the system doesn’t restrict them regarding their deals and neither is the system responsible for interpersonal relationships after an application or order is approved and registered.
- Assume each person involve in a deal would assess the interaction with the other person in the assessment notification in order to make the rating feature more efficient and beneficial for both parties.
- Assume that business contracts regarding the Commercial Banks are signed by the business team and everything related to card payment is establish by them.
- Assume that the system for the moment is not subject to state legislation in the interactions with its users

2.4 Constraints

The system will be potentially constrained:

- The fact that payment for subscriptions involve third party Institutions. Relationship with such Institutions and contract conditions may affect the system’s activity in a direct way.
- The fact that the system doesn’t interfere and doesn’t have information about the physical interactions between people who have agreed on a Job deal or a Service deal inside the platform. If physical interactions have many problems then the system’s reputation will be affected very much.
- The need for a continuous internet connection in order to upload on real time the latest Jobs or Services

- For the moment the platform will be available only on android systems. This way the platform loses potential customers in the market who possess mobiles with other systems implemented.
- The ability of the targeting audience to understand and use such platform effectively as it is intended.
- Responsibility of the users to assess their interactions fairly in order to make rating system reliable and effective.

2.5 Dependencies

- Payment functionality is depended on a third party Institutions.
- Filtering Jobs or Service in the platform list is depended on the quality of keywords the user enters in the search bar.
- Rating system is depended on the integrity of the users in order to be effective
- Verbal interaction between stakeholders if fully depended on their initiative and not on the platform. The platform only provides a channel where they can find each other.

Requirements

3.1 Functional Requirements

The requirement numbering follows the scheme – BR_##

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_01	<i>The system should operate only on android systems</i>	<i>This will be the mobile application which our customers will use.</i>	1	1/04/2019	Gerild Pjetri
BR_02	<i>The system should upload the whole list of jobs and services in the main module "Kreu" as soon as customer enters the activity.</i>	<i>Once in while or certaing period of time relatively small system requests from the service the jobs and services if the user still in "Kreu"</i>	1	1/04/2019	Gerild Pjetri, Arbi Elezi
BR_03	<i>The system can search for job types or service type by offering the customer a search on each section of the main module "Kreu" in order to filter from the whole.</i>	<i>Search bar will take as input certain letters and based on that is going to make queries in the database by filtering.</i>	1	1/04/2019	Gerild Pjetri, Arbi Elezi
BR_04	<i>The system should handle on time notifications by approval of the jobs or services, when clicked by the customer.</i>	<i>This will be implemented in effective way by using streams.</i>	1	1/04/2019	Gerild Pjetri, Arbi Elezi
BR_05	<i>The system will have a particular module for the jobs created by the customer to supply the market.</i>	<i>In order for the customer to be able to post jobs in the market he should buy one of the subscriptions available. In this module he is able to modify his jobs the way he wants.</i>	1	1/04/2019	Gerild Pjetri, Arbi Elezi
BR_06	<i>The module of personal jobs created for the market should have functionalities such as statistics on number of applicants , deadlines , deals and approval sections.</i>	<i>On this section of the system the customer is able to have control over what is he posting and control over the interactivity between his posts and other interested customers in his job</i>	2 3	1/04/2019	Gerild Pjetri, Arbi Elezi

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Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_07	<i>The system will have a particular module for the services created by the customer to supply the market.</i>	<i>In order for the customer to be able to post services in the market he should buy one of the subscriptions available. In this module he is able to modify his services the way he wants.</i>	1	1/04/2019	Gerild Pjetri, Arbi Elezi
BR_08	<i>The module of personal services created for the market should have functionalities such as statistics on number of applicants,, deals and approval sections.</i>	<i>On this section of the system the customer is able to have control over what is he posting and control over the interactivity between his posts and other interested customers in his services</i>	1	1/04/2019	ArbiElezi/ Albi Nikehasani
BR_09	<i>The subscription module will upload a list of the latest packages to buy. At this point of the system the user must enter his card information so he can be able to buy one.</i>	<i>Here a money transaction will take place between customers and our service.</i>	1	1/04/2019	Elisa Daka
BR_10	<i>The system will connect job seeker with job givers by making each other aware on their existence using notifications and approval sections.</i>	<i>The notifying system of is going to play a key role in the scope of the system as a whole because it relates to the purpose of connecting the customers together.</i>	1	1/04/2019	Gerild Pjetri
BR_11	<i>The system will have professional analysts on understanding the nature of bad review reports, in order to make reviews a serious tool for measuring the type of jobs or services</i>	<i>Reviews and Reputation of the customers will play a key role on the seriousness of the system. Bad cases will be taken immediately into consideration by the right actions.</i>	2	1/04/2019	Denada Bufi
BR_12	<i>The system will provide an assessment functionality so the stakeholders can rate each other based on their performance and skills.</i>	<i>This assessment will be given in the form of notification as soon as a deal is approved. The user may discard it or he may take time to complete it.</i>	1	1/04/2019	Gerild Pjetri

3.2 Non-Functional Requirements

3.2.1 User Interface Requirements

Android application will run on different devices that have different screen sizes and pixel densities. The system performs basic scaling and resizing to adapt user interface to different screens of these devices.

User Interfaces will be supported for different screen sizes and for different pixel densities taking into consideration solid strategies in building and providing such necessity for application's worth.

Logically interfaces will be divided in 4 main parts:

The first are interfaces which deal with functionalities outside the platform such as the entry point provided that the credentials are given or account registration.

The second are interfaces which deal with "Kreu" module representing the real market of jobs and services existing inside the platform.

The third are interfaces which deal with the management of Jobs and Service created for the market by the user if he/she is a Job Provider or Service Provider.

The fourth are interfaces which deal with subscription payment and Debit/Card establishment functionalities.

Error messages will be in the forms of alert messages which pops up and occupy a small portion of the interface and they could be messages which fills the whole screen asking for validation of serious and more detailed functionalities such as subscription payment confirmation or Job adding confirmation.

3.2.2 Usability

➤ Efficiency of use :

- The user must find quickly and accomplish fast what is he trying to do inside the platform
- No more than three clicks the system should provide him the section or functionality he is looking for.

➤ Intuitiveness :

- The interface is easy to learn and navigate
- Buttons , headings and help/error messages should be simple to understand

- Low perceived workload :
 - The interface appears easy to use rather intimidating demanding or frustrating.
- No usage manual :
 - The platform must be easy and quickly understood without the need of a manual.

3.2.3 Performance

Response Time

- 0.1 second should be the limit for having the user feel that the system is reacting instantaneously, meaning that no special feedback is necessary except to display the result.
- System calls to 3rd parties system involved particularly with bank systems about payments should be stated clearly in the contract deal by business team not to be more than 3 seconds. In emergency cases they should be able to give us another emergency channel in order to provide the service without interrupting for any case.

Scalability

- In case the system increases rapidly and matures the platform needs to have alternative cloud technique or additional hardware to handle potential needs.

Time of Execution

- Effective algorithms for fetching data from database
- Good internet connection
- Effective operating system where the platform operates

3.2.4 Capacity

The mobile application for android systems will be deployed in the Google Play Store , it will be capable of accessing the central database and the web servers supported by spring. This application will have the size of no more than 90MB.

Availability

- The mobile application will be available for use 24/7
- The developer staff will be available 12 hours a day for every problem in the platform.

Latency

- Internet connection strength should be above 6Mbps in order to provide an effective activity inside the platform.
- Algorithm used should be effective with respect to their complexity
- Size of database should match the potential needs accordingly with hardware capabilities in order to preserve acceptable latency in accessing the database.

3.2.5 Manageability/Maintainability

Monitoring

- 2 developers should be always ready to interfere in the system even after 12 hours of official availability. If it occurs any major problem which threatens seriously the activity of the platform they must immediately take charge of the problem.
- The logging system should provide detailed information on the nature of requests coming through the platform.

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- If any two consecutive requests from the source come faster than 0.4 mseconds they must be discarded and not served.
- Error system should have detailed description on nature of error and on each request/response of data transfer objects there must be message attributes possible to combine prebuilt error messages with custom errors effectively.
- Automatic error handling must take place for particular predictable serious cases.

Maintenance

- The logical modules of the system should be simply connected and comprehensive even for new or unexperienced developers so they can solve issues directly and quickly.
 - “Kreu” module which deals with market of jobs and services
 - “Sherbimet e Mia” module which deals with management of service by Service Provider
 - “Punet e Mia” module which deals with management of jobs by Job Provider
 - “Abonimet” which deals with subscriptions functionalities and payment activity inside the platform
- Update of new libraries should be a priority for the developer team and not to rely for a long time in old APIs
- Platform should be subject to change if certain maintenance needs are necessary to accomplish.

Operations

Operations that will be provided to the user in any case are:

- Immediate and real time response on the latest updates in the market for jobs and service
- In case of data loss or system crash the users should be paid accordingly and responsibly for any kind of damage caused by the system.

- User activity data inside the platform should be shared only in agreement with user and not in other case.
- Operations regarding maintenance of account should be provided on each phase of program evolution.

3.2.6 System Interface/Integration

- System interfaces regarding connection with third party institutions should be studied and analyzed extensively and after such task is periodically accomplished coordination with our interfaces shall happen.
- Connection Interfaces regarding back end services which are prebuilt by Spring Technology should perform accordingly with their specification and the responsibility belongs to their developer team on certain issues which our system may face.

Network and Hardware Interfaces

- Since the stimulations will take place on local machine the interfaces regarding network and hardware resources are subject to future elaboration.

3.2.7 Security

The purpose of security in our platform is to protect the market .If certain issues happen and control of the system is lost the market can crash. The damage is morally high for the platform and for the users who expect their activity to be continuous and their financial income is dependent on the platform.

Protection

- Token strategies are going to be used in order to avoid multiple robotic sequential requests. This approach will help in studying the nature of each request which comes through the system.
- Spring Security for back-end services is going to be used in order to protect communication with database services or other third party services.
- Algorithms such as hash256 are going to be used to encrypt the secret key used for creation of token.

- Data format validation is going to take place through various methods using regex rules in order to accept appropriate format for information coming through the system.
- Logging strategies should be used extensively

Authorization and Authentication

- All users will have be same in hierarchy and consequently they are authorized the same way.
- No need for administrators to be authorized. The role of administrators will be represented by developer team who have direct access on the mechanism of the platform. They can perform various actions regarding the platform functionalities and data used.
- Methods used for authentication involve traditional and well know approach using a username and password in order to enter the platform

3.2.8 Data Management

- Database type should be NoSQL particularly MongoDB.
- The document Database MongoDB should perform well in scalability properties and flexibility in querying or indexing what is needed.
- Interaction with MongoDB should be fast.

3.2.9 Standards Compliance

The platform will respect Albania Constitution and will obey “Kodi I Punes” laws regarding the interactivity and providing the environment for job interaction between Albania Citizens.

3.2.10 Portability

- The platform should be accessible from any mobile phone providing android system.

3.2.11 Domain Requirements

- The system should be different in style of approaching the clients to it's competitors
- The only similarity with other system should be the market and the nature of business where they operate not the methodologies used to carry it's purpose.
- Regarding certain traditional features the system should use what is found appropriate and acceptable for customers.

User Scenarios/Use Cases

4.1 User Scenarios:

Scenario 1 : User logs in successfully

- The platform asks for username and password
- The user enters the credentials
- The credentials are correct
- The platform redirects user to “Kreu” Interface

Scenario 2 : User fails to log in

- The platform asks for username and password
- The user enters the credentials
- The credentials are incorrect
- Error message pops up

Scenario 3 : User registers successfully

- In the registration section the platform asks the user for his identity details
- The user clicks the responsible button for registration.
- The platform checks if the data are in the right format
- The platform validates the account and now the user is registered on the system

Scenario 4 : User fails to register.

- In the registration section the platform asks the user for his identity details
- The user clicks the responsible button for registration.
- The platform check if the data are in the right format
- The format is incorrect
- The user is not registered in the system and try again message pops up.

Scenario 5 : The user forgets his password

- The user fails to log in because he doesn't remember his password.
- He enters the section responsible for retaking the password.
- He sends his email to the system.
- If the email matches with his account then his request is validated
- His credentials are sent in his email by the system.

Scenario 6 : The user as a Job Provider successfully adds a job in the platform.

- The user opens main menu
- Clicks "Punet e Mia"
- He adds new job data
- The system checks if the user possesses a subscription
- Subscription is validated and new job is added in the market

Scenario 7 : The user as a Job Provider fails to add a job in the platform.

- The user opens main menu
- Clicks “Punet e Mia”
- He adds new job data
- The system checks if the user possesses a subscription.
- Subscription is not validated and the job is not added in the market
- A message pops up to notify user about a subscription

Scenario 8 : The user as a Service Provider successfully adds a service in the platform.

- The user opens main menu
- Clicks “Sherbimet e Mia”
- Enters data required for new service in the add service section
- The system checks if the user possesses a subscription.
- Subscription is validated and a new service is added in the market

Scenario 9 : The user as a Service Provider fails to add a service in the platform.

- The user opens main menu
- Clicks “Sherbimet e Mia”
- Enters data required for new service in the add service section
- The system checks if the user possesses a subscription.
- Subscription is not validated and the service is not added in the market
- A message pops up to notify user about a subscription

Scenario 10 : The Job Seeker successfully finds a job in the Job Section.

- The user logs in successfully
- In the “Kreu” interface at the Jobs section he searches for the job he wants .
- The list is filtered and after scrolling he finds what he is looking for.
- He applies for the job and waits for Job Provider approval

Scenario 11 : The Job Seeker fails to find a job in the Job Section.

- The user logs in successfully
- In the “Kreu” interface at the Jobs section he searches for the job he wants.
- The platform filters the list according to the keywords and after scrolling a little bit he couldn’t find what he is looking for.
- He doesn’t apply for any job.

Scenario 12 : The Service Seeker successfully finds a service in the Service Section.

- The user logs in successfully
- In the “Kreu” interface at the Service section he searches for the service he wants .
- The list is filtered and after scrolling he finds what he is looking for.
- He orders the service and waits for Service Provider approval

Scenario 13 : The Service Seeker fails to find a service in the Service Section.

- The user logs in successfully
- In the “Kreu” interface at the Service section he searches for the Service he wants.
- The platform filters the list according to the keywords and after scrolling a little bit he couldn't find what he is looking for.
- He doesn't order any service.

Scenario 14 : The Job Provider approves the application for job

- The user logs in successfully
- As a Job Provider he controls his notification
- After studying the profiles of the applicants he decides to approve one of them
- After approval notification is send to the applicant.
- And to both of them an assessment notification is send in order to assess the deal they had with each other.

Scenario 15 : The Job Provider doesn't approve the application for job

- The user logs in successfully
- As a Job Provider he controls his notification
- After studying the profiles of the applicants he doesn't approve any of them.

Scenario 16: The Service Provider approves order for his service

- The user logs in successfully
- As a Service Provider he controls his notification
- After studying the profiles of the Service Seekers he approves one of them or multiple of them and arranges the schedule on his own.
- After approval notification is send to the Service Seeker.
- And to both of them an assessment notification is send in order to assess the deal they had with each other.

Scenario 17: The Service Provider doesn't approve any order for his service

- The user logs in successfully
- As a Service Provider(having a dedicated subscription) he controls his notification
- After studying the profiles of the Service Seekers he doesn't approve any of them.

Scenario 18: The user fails to buy a subscription

- The user opens main menu
- Clicks "Abonime"
- Enters financial data in the Card section

- The platform accepts his card
- Then he tries to buy a subscription
- The system checks his Card Amount
- The amount is not enough and the subscription purchase is not possible.

Scenario 19: The user successfully buys a subscription

- The user opens main menu
- Clicks “Abonime”
- Enters financial data in the Card section
- The platform accepts his card
- Then he tries to buy a subscription
- The system checks his Card Amount
- The amount is enough and the subscription purchase is successful.

Scenario 20: The user successfully changes the settings

- The user opens main menu
- Clicks settings icon
- He changes the theme of the platform

4.2 Use Cases

Name	Login
Summary	The user enters the platform by providing necessary credentials
Actor	Job Provider, Job Seeker, Service Provider ,Service Seeker
Description	In order for the user to use the platform he must provide necessary credentials. After credentials are validated the user is redirected inside the platform. Inside the platform the user can use go on with his desired activities.
Precondition	The user must have an account in order to proceed with login security functionality. The account is given when the user registers his details.
Alternative	There is no alternative. This is done to protect personal user data regarding his activity inside the platform.
Post condition	The user can potentially use every feature inside the platform by following the procedures required.

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Name	Account Registration
Summary	The user is provided with an account.
Actor	Job Provider, Job Seeker, Service Provider, Service Seeker
Description	The user enters his identity details in the account registration section. If the data are in the right format the user is equipped with a personal account.
Precondition	No precondition
Alternative	There is no alternative to accomplish this functionality.
Post condition	The user is able to access the platform with the account given.

Name	Retake Forgotten Password
Summary	The user regains his forgotten password
Actor	Job Provider, Job Seeker, Service Provider, Service Seeker
Description	The user has an account to the platform but he has forgotten the password to enter inside. In the retake password section he/she sends his email to the system. The system validates the email with the account and sends credentials back to his email. Now he can login.
Precondition	The user must have an account.
Alternative	There is no alternative to accomplish this functionality.
Post condition	The user must change his password for security reasons.

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Name	Settings
Summary	The user changes settings during his activity inside the platform.
Actor	Job Provider, Job Seeker, Service Provider, Service Seeker
Description	In order for the user to change the look of the platform or the language provided the user changes the settings in the settings section which can be accessed from the menu section.
Precondition	The user must be logged in.
Alternative	There is no alternative.
Post condition	No post condition.

Name	Check Notifications
Summary	The user check notification for applications or approvals.
Actor	Job Provider, Job Seeker, Service Provider, Service Seeker
Description	The user if it is in the role of a Job/Service Provider checks his notifications for new applications and if it is in the role Job/Service Seeker he checks for approval .
Precondition	The notification in one user takes place if a certain action by another user has happened.
Alternative	There is no alternative.
Post condition	After notifications and deal settled an assessment notification waits to be valued.

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Name	Buy Subscription
Summary	The user buys subscription to be possible to add Job/Service in the market.
Actor	Job Provider , Service Provider
Description	The user buys one of the subscriptions available in the system. Depending on the subscription he/she possesses a limited number of Jobs/Services which can be added to the market.
Precondition	The user must have a financial card established in the system.
Alternative	There is no alternative.
Post condition	Fully Job/Service Provider capabilities inside the platform.

Name	Insert Card
Summary	The user inserts credit/debit card in the platform.
Actor	Job Provider , Service Provider
Description	The user in order to buy a subscription must insert a valid card in the platform The data inserted for the card are checked and the system decides whether the data is valid or not with respect to financial institutions details.
Precondition	The must have an account and must be logged in.
Alternative	There is no alternative.
Post condition	The user now can buy subscription provided than the card has money in it.

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Name	Add Job
Summary	The user adds a job in the job market.
Actor	Job Provider
Description	The user in order to find potential employees he/she posts a job in the market so he can be searched by people who can do the job or those who are interested in the job.
Precondition	The user must have bought a subscription.
Alternative	There is no alternative.
Post condition	The user has the ability to see the applications made and also approve if he convinced.

Name	Add Service
Summary	The user adds a service in the job market.
Actor	Service Provider
Description	The user in order to find potential customers he/she posts a job in the market so he/she can be searched by people who need that service
Precondition	The user must have bought a subscription.
Alternative	There is no alternative.
Post condition	The user has the ability to see orders made and also approve if he convinced.

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Name	Approve Application
Summary	The user approves one of the applications made for the job..
Actor	Job Provider
Description	The user after a studying the profile of the Job Seeker he decides to approve his/her application.
Precondition	The user must have posted a job in the market.
Alternative	There is no alternative.
Post condition	Assessment of the interaction between each other

Name	Approve Order
Summary	The user approves one of the orders made for the service.
Actor	Service Provider
Description	The user after a studying the profile of the Service Seeker he decides to approve his/her order.
Precondition	The user must have posted a service in the market.
Alternative	There is no alternative.
Post condition	Assessment of the interaction between each other

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Name	Assess Job Interaction
Summary	The users assess each other performance during the job interaction together.
Actor	Job Provider, Job Seeker
Description	After the job is approved it is the responsibility of the stakeholders to reach a deal communicated directly with each other. Immediately after the Job Provider approves the applications, an assessment notification comes to stakeholders. The assessment results affect rating feature of both stakeholders.
Precondition	. The Job Provider must have approved the application
Alternative	There is no alternative.
Post condition	Rating changes accordingly with the assessment.

Name	Assess Service Interaction
Summary	The users assess each other performance during the service interaction together.
Actor	Job Provider, Job Seeker
Description	After the service is approved it is the responsibility of the stakeholders to reach a deal communicating directly with each other. Immediately after the Service Provider approves the order, an assessment notification comes to both stakeholders. The assessment results affect rating feature of both.
Precondition	The Service Provider must have approved the order
Alternative	There is no alternative.
Post condition	Rating changes accordingly with the assessment.

Zanatciu Requirements Specification

Name	Search Job
Summary	The users searches for job in the market list of job on “Kreu”
Actor	Job Seeker
Description	The user enters keywords related to the job. After the key responsible to execute search is pressed the list is filter and so the Job Seeker sees more clearly the type of jobs he is looking for.
Precondition	The user must be logged in
Alternative	There is no alternative.
Post condition	No post condition

Name	Apply For Job
Summary	The user after finding a job in the filtered list he applies for job.
Actor	Job Seeker
Description	The user enters keywords related to the job. After the key responsible to execute search is pressed the list is filter and so the Job Seeker sees more clearly the type of jobs he is looking for. When he finds the job he is looking he opens the job and reads more clearly the dedicated view for the job. In the end he applies
Precondition	The user must be logged in
Alternative	There is no alternative.
Post condition	No post condition

Zanatciu Requirements Specification

Name	Search Service
Summary	The users searches for services in the market list of services on “Kreu”
Actor	Service Seeker
Description	The user enters keywords related to the service. After the key responsible to execute search is pressed the list is filter and so the Service Seeker sees more clearly the type of services he needs.
Precondition	The user must be logged in
Alternative	There is no alternative.
Post condition	No post condition

Name	Order Service
Summary	The users searches for services in the market list of service on “Kreu”
Actor	Service Seeker
Description	The user enters keywords related to the job. After the key responsible to execute search is pressed the list is filter and so the Job Seeker sees more clearly the type of jobs he is looking for. When he finds the job he is looking he opens the job and reads more clearly the dedicated view for the job. In the end he applies
Precondition	The user must be logged in
Alternative	There is no alternative.
Post condition	No post condition

APPENDIX

Appendix A. Definitions, Acronyms, and Abbreviations

Br => Business Requirement

Appendix B. References

No documents.

Appendix C. Requirements Traceability Matrix

The following trace matrix examples show one possible use of naming standards for deliverables (FunctionalArea-DocType-NN). The number has no other meaning than to keep the documents unique. For example, the Bargaining Unit Assignment Process Flow would be BUA-PF-01.

For example (1):

Business Requirement	Area	Deliverables	Status
BR_LR_01 The system should validate the relationship between Bargaining Unit/Location and Job Class.---Comments: Business Process = "Assigning a Bargaining Unit to an Appointment" (Priority 1)	BUA	BUA-CD-01 Assign BU Conceptual Design	Accepted
		BUA-PF-01 Derive Bargaining Unit-Process Flow Diagram	Accepted
		BUA-PF-01 Derive Bargaining Unit-Process Flow Diagram	Accepted
BR_LR_09 The system should provide the capability for the Labor Relations Office to maintain the job class/union relationship.---Comments: Business Process = "Maintenance" (Priority 1)	BUA	BUA-CD-01 Assign BU Conceptual Design	Accepted
		BUA-PF-02 BU Assignment Rules Maint Process Flow Diagram	ReadyForReview

For example (2):

BizReqID	Pri	Major Area	DevTstItems DelivID	Deliv Name	Status
BR_LR_01	1	BUA	BUA-CD-01	Assign BU Conceptual Design	Accepted
BR_LR_01	1	BUA	BUA-DS-02	Bargaining Unit Assignment DB Modification Description	Accepted
BR_LR_01	1	BUA	BUA-PF-01	Derive Bargaining Unit-Process Flow Diagram	Accepted

Zanatciu Requirements Specification

BizReqID	Pri	Major Area	DevTstItems DelivID	Deliv Name	Status
BR_LR_01	1	BUA	BUA-UCD-01	BU Assign LR UseCase Diagram	ReadyForReview
BR_LR_01	1	BUA	BUA-UCT-001	BU Assignment by PC UseCase - Add Appointment and Derive UBU	Reviewed
BR_LR_01	1	BUA	BUA-UCT-002	BU Assignment by PC UseCase - Add Appointment (UBU Not Found)	Reviewed
BR_LR_01	1	BUA	BUA-UCT-006	BU Assignment by PC UseCase - Modify Appointment (Removed UBU)	Reviewed
BR_LR_09	1	BUA	BUA-CD-01	Assign BU Conceptual Design	Accepted
BR_LR_09	1	BUA	BUA-DS-02	Bargaining Unit Assignment DB Modification Description	Accepted
BR_LR_09	1	BUA	BUA-PF-02	BU Assignment Rules Maint Process Flow Diagram	Accepted
BR_LR_09	1	BUA	BUA-UCD-03	BU Assign Rules Maint UseCase Diagram	Reviewed
BR_LR_09	1	BUA	BUA-UCT-045	BU Assignment Rules Maint: Successfully Add New Assignment Rule	Reviewed
BR_LR_09	1	BUA	BUA-UCT-051	BU Assignment Rules MaintUseCase: Modify Rule	Reviewed
BR_LR_09	1	BUA	BUA-UCT-053	BU Assignment Rules MaintUseCase - Review Assignment Rules	Reviewed
BR_LR_09	1	BUA	BUA-UCT-057	BU Assignment Rules MaintUseCase: Inactivate Last Rule for a BU	Reviewed
BR_LR_09	1	BUA	BUA-UI-02	BU AssignRules Maint UI Mockups	ReadyForReview
BR_LR_09	1	BUA	BUA-TC-021	BU Assignment Rules Maint TestCase: Add New Rule (Associated Job Class Does Not Exist) - Success	ReadyForReview
BR_LR_09	1	BUA	BUA-TC-027	BU Assignment Rules Maint TestCase: Modify Rule - Success	ReadyForReview
BR_LR_09	1	BUA	BUA-TC-035	BU Assignment Rules Maint TestCase: Add New Rule (Associated Job Class Does Not Exist) - Error Condition	ReadyForReview
BR_LR_09	1	BUA	BUA-TC-049	BU Assignment Rules Maint TestCase: Modify Rule - Error Condition	ReadyForReview

For example (3):

BizReqID	CD01	CD02	CD03	CD04	UI01	UI02	UCT01	UCT02	UCT03	TC01	TC02	TC03	TC04
BR_LR_01			X		X		X			X		X	
BR_LR_09	X			X		X			X		X		X
BR_LR_10	X			X					X		X		
BR_LR_11		X											

Appendix D. Organizing the Requirements

This section is for information only as an aid in preparing the requirements document.

Detailed requirements tend to be extensive. Give careful consideration to your organization scheme. Some examples of organization schemes are described below:

By System Mode

Some systems behave quite differently depending on the mode of operation. For example, a control system may have different sets of functions depending on its mode: training, normal, or emergency.

By User Class

Some systems provide different sets of functions to different classes of users. For example, an elevator control system presents different capabilities to passengers, maintenance workers, and fire fighters.

By Objects

Objects are real-world entities that have a counterpart within the system. For example, in a patient monitoring system, objects include patients, sensors, nurses, rooms, physicians, medicines, etc. Associated with each object is a set of attributes (of that object) and functions (performed by that object). These functions are also called services, methods, or processes. Note that sets of objects may share attributes and services. These are grouped together as classes.

By Feature

A feature is an externally desired service by the system that may require a sequence of inputs to affect the desired result. For example, in a telephone system, features include local call, call forwarding, and conference call. Each feature is generally described in a sequence of stimulus-response pairs, and may include validity checks on inputs, exact sequencing of operations, responses to abnormal situations, including error handling and recovery, effects of parameters, relationships of inputs to outputs, including input/output sequences and formulas for input to output.

By Stimulus

Some systems can be best organized by describing their functions in terms of stimuli. For example, the functions of an automatic aircraft landing system may be organized into sections for loss of power, wind shear, sudden change in roll, vertical velocity excessive, etc.

By Response

Some systems can be best organized by describing all the functions in support of the generation of a response. For example, the functions of a personnel system may be organized into sections corresponding to all functions associated with generating paychecks, all functions associated with generating a current list of employees, etc.

By Functional Hierarchy

When none of the above organizational schemes prove helpful, the overall functionality can be organized into a hierarchy of functions organized by common inputs, common outputs, or common internal data access. Data flow diagrams and data dictionaries can be used to show the relationships between and among the functions and data.

Additional Comments

Whenever a new Requirements Specification is contemplated, more than one of the organizational techniques given above may be appropriate. In such cases, organize the specific requirements for multiple hierarchies tailored to the specific needs of the system under specification.

There are many notations, methods, and automated support tools available to aid in the documentation of requirements. For the most part, their usefulness is a function of organization. For example, when organizing by mode, finite state machines or state charts may prove helpful; when organizing by object, object-oriented analysis may prove helpful; when organizing by feature, stimulus-response sequences may prove helpful; and when organizing by functional hierarchy, data flow diagrams and data dictionaries may prove helpful.