Introduction to TFS 2013

MD. MAHEDEE HASAN

MAHEDEE.NET

Introduction to TFS 2013

1st Edition

Md. Mahedee Hasan

Microsoft Most Valuable Professional (MVP)
Software Architect
Leadsoft Bangladesh Limited
Blog: http://mahedee.net/
Email: mahedee.hasan@gmail.com
Linkedin: http://www.linkedin.com/in/mahedee
Facebook: https://www.facebook.com/mahedee.net

Table of Contents

History and Overview

- Microsoft buys **SourceSafe** – 1994
  - Also called Microsoft Visual SourceSafe **(VSS)**
  - Purchased from North Carolina company called **One Tree Software**
  - SourceSafe is a **source control**
  - Data stored in **file system**
  - Manage **small team**

- **Microsoft TFS**
  - Also called **Microsoft Team Foundation Server**
  - First release – **2005**
  - Data stored in **SQL Server**
  - Can Manage **Large team**
  - Make developers life easy

Clients of TFS

- **Visual Studio**
    - Source Control
    - Build
    - Work Items
    - Reporting

- **Eclipse**
    - Source Control
    - Build
    - Work Items

- **Web Access**
    - Source Control (read)
    - Work Items
    - Reporting

- Test Manager
    - Tests

- Excel
    - Reporting
    - Work Items

- Outlook
    - Alerts

- Project
    - Work Items

- SharePoint
    - Reporting
    - Documentation

- SCVMM
    - Lab Management

- TFS Admin
    - Admin

- TFS Power Tools
    - Admin

Version Control Using TFS

- Version control is a **system** that **records changes** to a file
- **Changes files over time** and you can recall specific versions later
- **Version control is more general** term of Source control
- Can create **branch and marge** it using source control
- For the examples, software source code as the files being version controlled, though in reality you can do this with nearly any type of file on a computer.

How to Connect with TFS
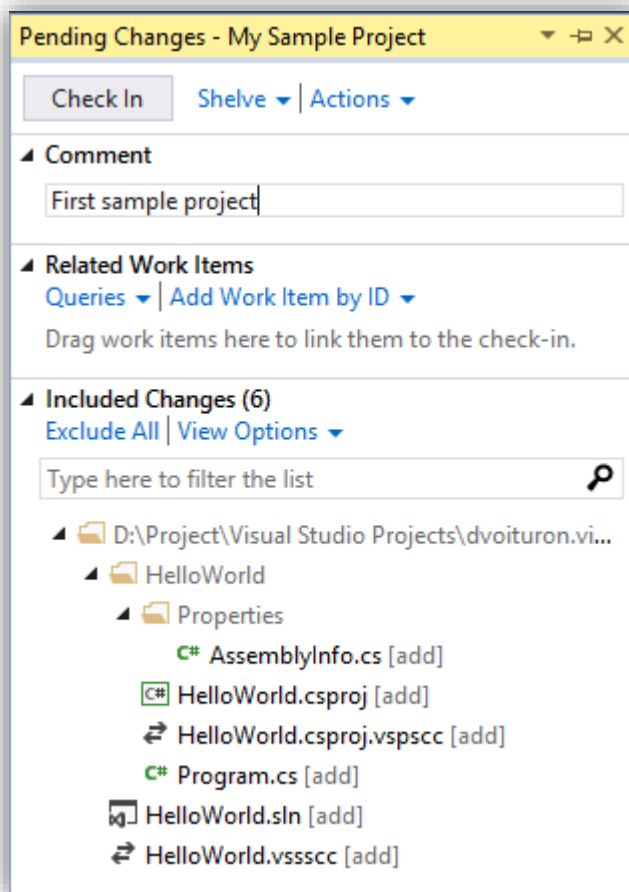
- Create an application
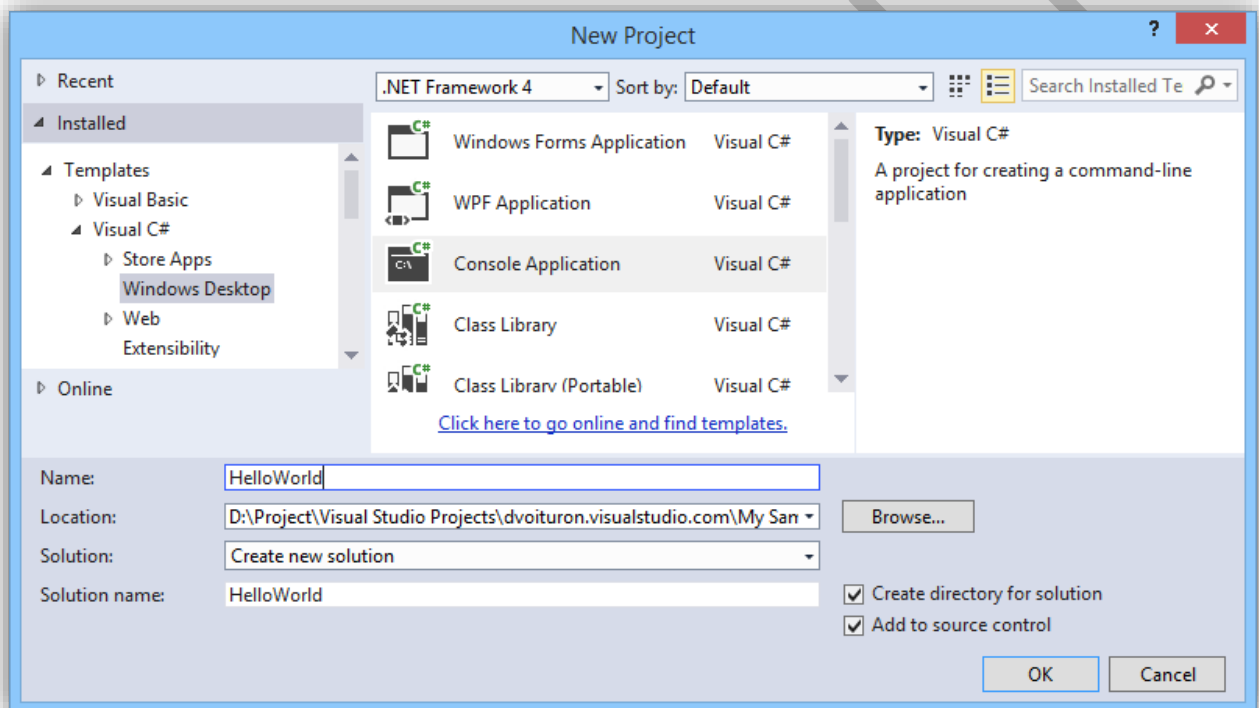
- Click on **Team Explorer**
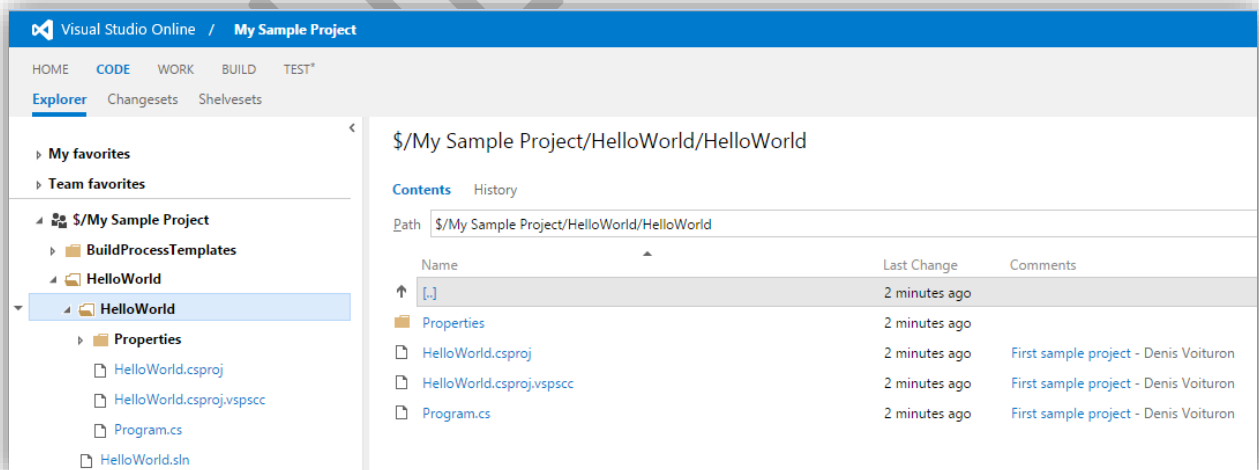- Click on **Source Control Explorer**
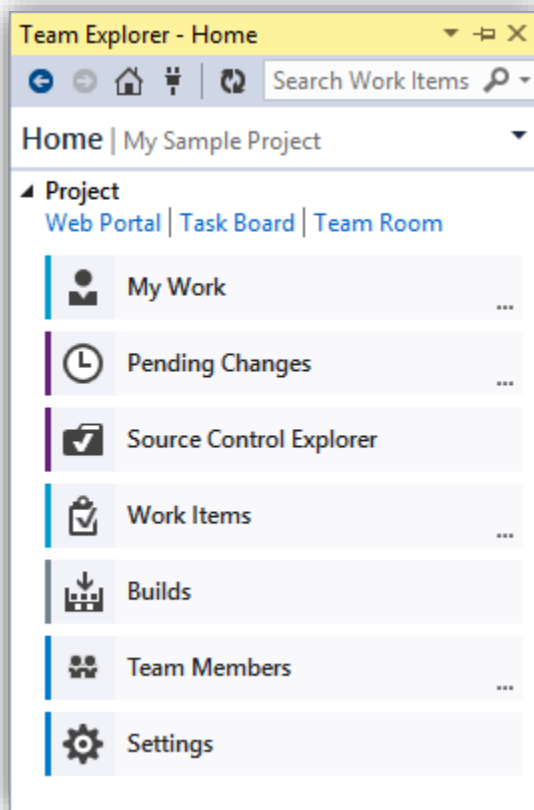
- Add project to the TFS and click next -> next -> finish
- **Check In** project to the TFS with proper comment

Check Out and Check In Code

- **Check Out** code for **edit**
- **Check In** code for **update to TFS**
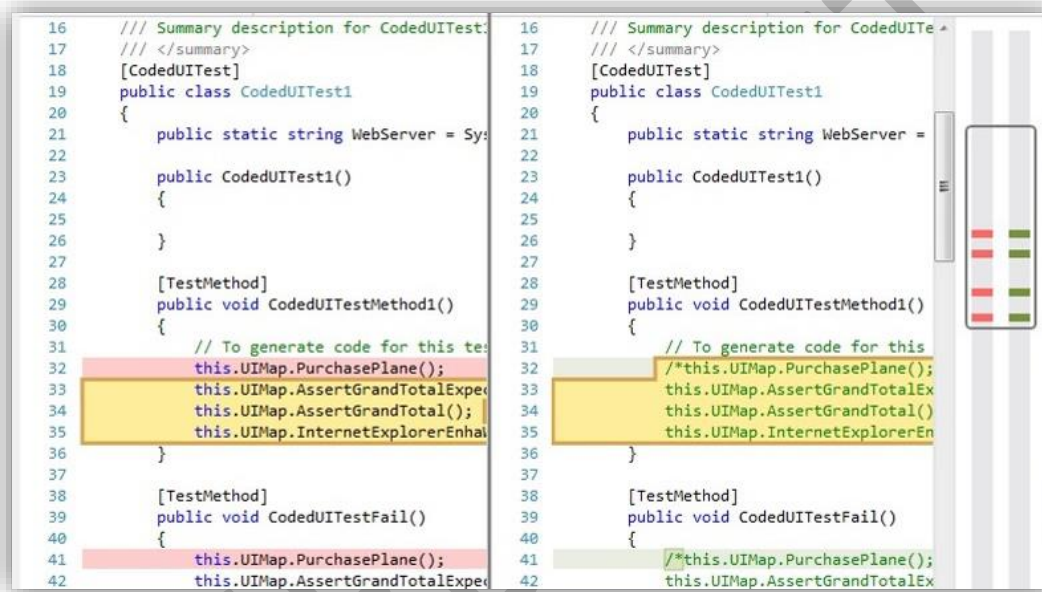
- See changes history in Web access

- Get Latest version to the local PC

Source control features

- Offline development
- History
- Compare tool
- Merging tool

Source Compare

- Can compare two change sets

Branching and Merging

Scenarios for Branching and Merging

- If you are having regular **problems with broken builds**, you should create a **development branch** to isolate **parallel development efforts.**
- If you have **features** that are causing stability issues
- **Teams** causing stability issues among each other, create separate feature or team branches beneath a development container folder in source control.

Common Scenarios in Practice

- Scenario 1 – No Branches.
- Scenario 2 – Branch for Release
- Scenario 3 – Branch for Maintenance.
- Scenario 4 – Branch for Feature.
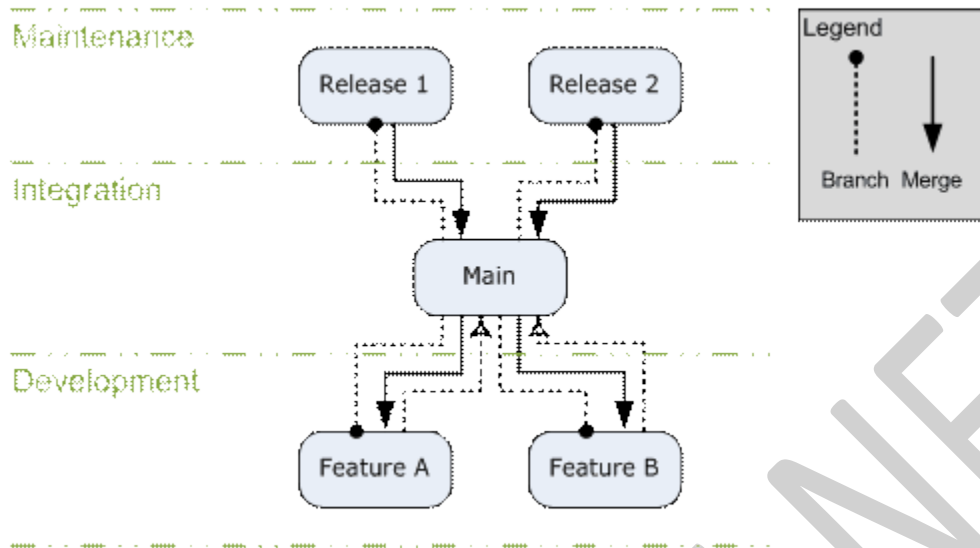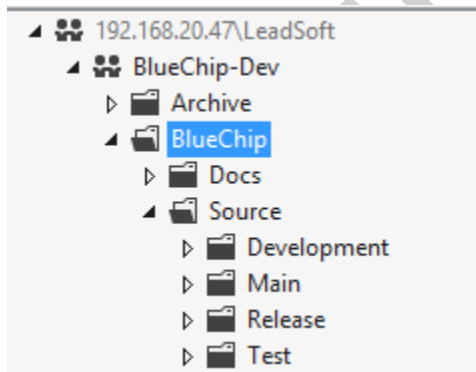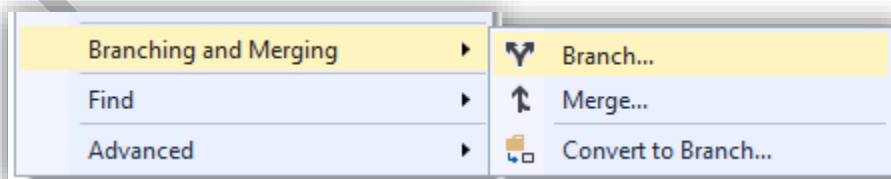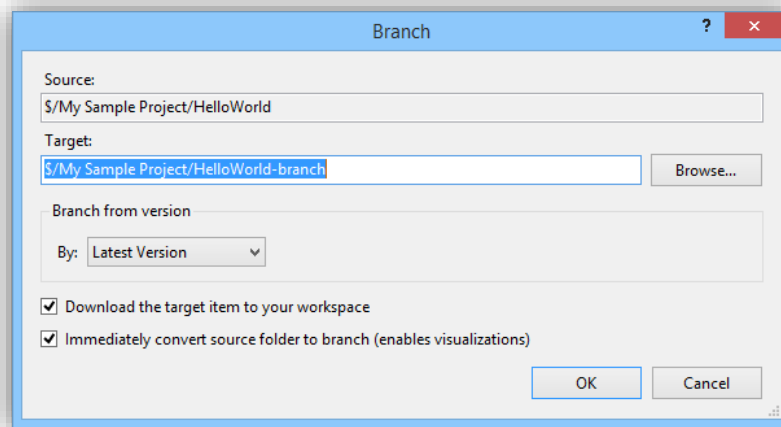- Scenario 5 – Branch for Team

Fig - *Logical Relationship Showing Branch and Merge Flow*
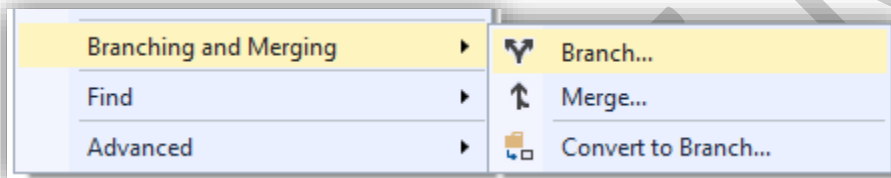
Organization's branching structure

How to create branch

How to marge to a branch

Source Control Merge Wizard (Workspace: MAHEDEE)   ?   ✕

Select the source and target branches for the merge operation

Select the branch that contains the changes you would like to merge.

Source branch:

$/BlueChip-Dev/BlueChip/Source/Development/Applications/Bluechip_2012   Browse...

Select the source branch changes you would like to merge:

◉ All changes up to a specific version

○ Selected changesets

Select the target branch for the merge operation. The drop-down list contains all target branches applicable to the selected source branch.

Target branch:

$/BlueChip-Dev/BlueChip/Source/Main/Applications/Bluechip_2012   ⌄   Browse...

< Previous   Next >   Finish   Cancel

ALM

- Also called **Application Life Cycle Management**
- Continuous value **delivery** and **rapid response to change**
- It is **a product life cycle** management
  - o Planning
  - o Development
  - o Maintenance
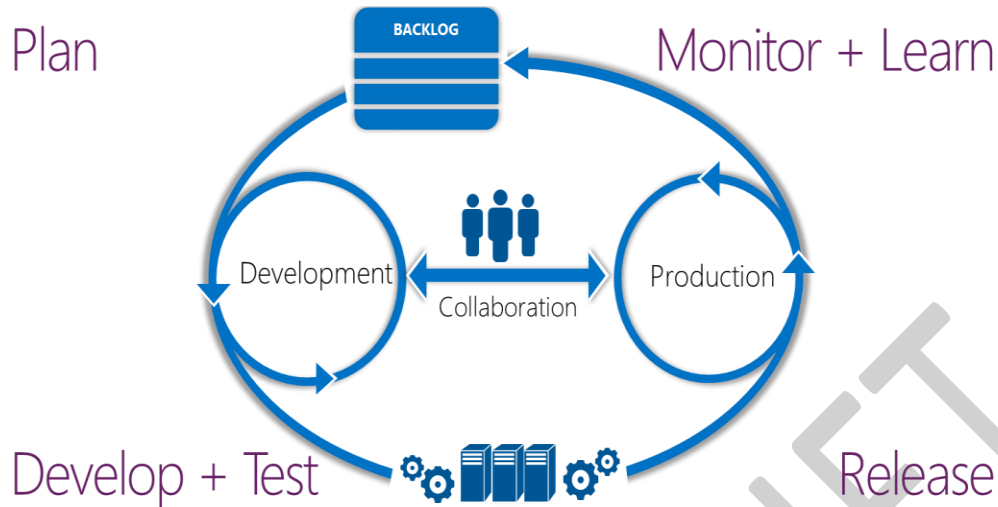
Product backlog

- A product backlog is a **prioritized list of all the features and functionality** needed to complete a project.
- In TFS, you manage your product **backlog using work items.**
- Your choice of work **item types will differ depending** on the process template used to create your team project.
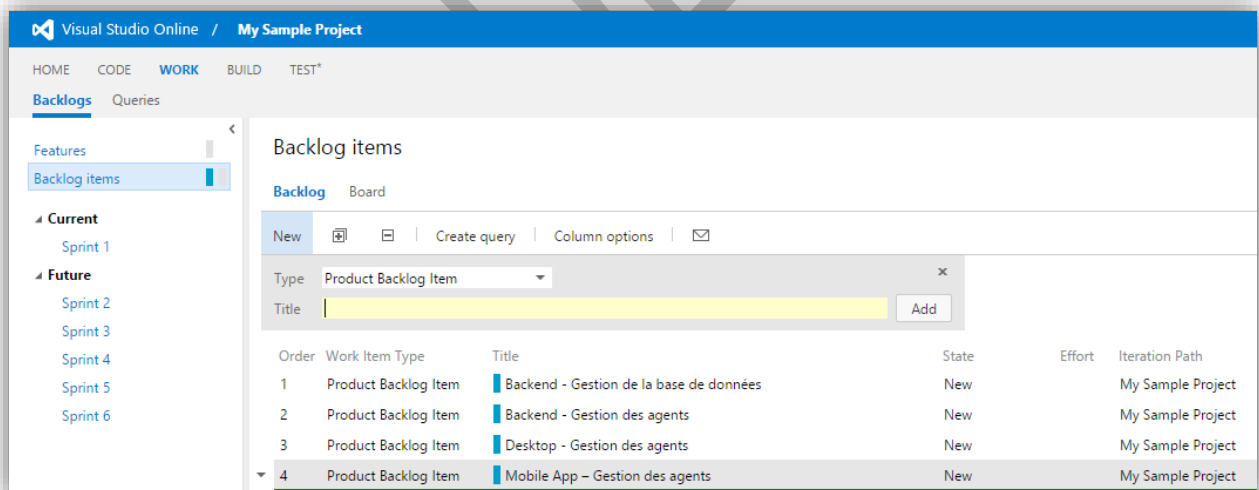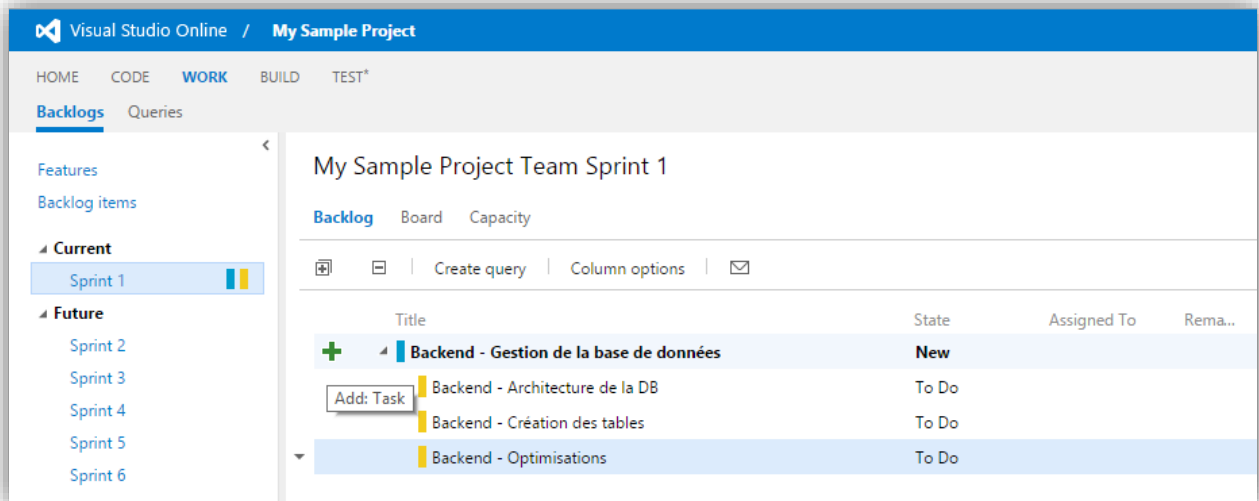

Work Item

- Team Foundation has work item tracking features
  - Designed to assist enterprise software development teams to **manage their work** and software **defect tracking**
- Share a set of common system fields.
- **Track comprehensive history** of changes to the work item.

- Support **links to other work items**, file **attachments**, or any other work product in Team Foundation.

Queries

- Uses to **track work item information** customized way
- You can **create query as your own**
- **Shared Queries**
    - o Queries for all project

- **My Queries**
    - o Queries for individual users

Board

- Also called **Kanban Board**
- Can see project or **iteration progress at a glance**
- Can **monitor backlog status** at a glance

Team- Zenith Quartz.4.12.35.51.Iteration 0

November 16 - December 17
1 work day remaining

Backlog **Board** Capacity

Group by **People**   Person **All**

PROPOSED **1 h**	ACTIVE **19.5 h**	RESOLVED **5 h**		CLOSED

▸ Aditee Mazumder

▸ Jafrin Islam

◢ MD. MAHEDEE
HASSAN
5.5 h

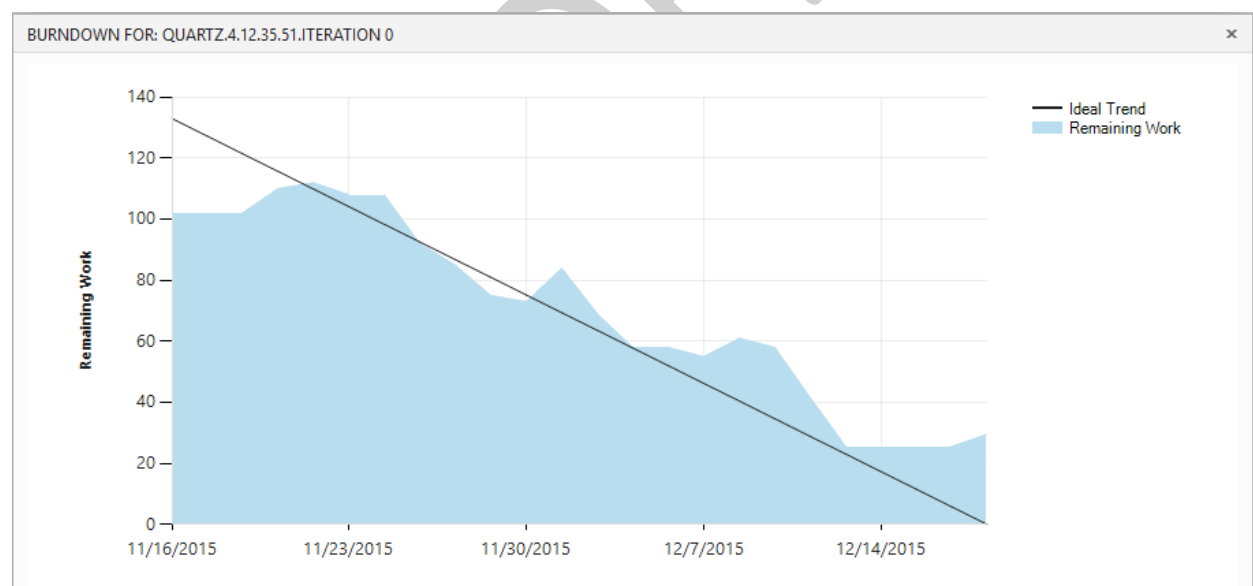| Code review of user access permission

MD. MAHEDEE ... | Coding review for IPO Text file Generation for NRB Clients
MD. MAHEDEE ... | Design review for user access permission

MD. MAHEDEE ... | Design review for IPO Application Order Submit Using Excel file
MD. MAHEDEE ... | Coding for IPO Application Submit using Excel File
MD. MAHEDEE ... |

| Code review for IPO Application Submit using Excel File
1.5 MD. MAHEDEE ... | Code review for IPO Application Order Submit Using Excel file
MD. MAHEDEE ... | Design review for account opening

MD. MAHEDEE ... | Design review for account opening details

MD. MAHEDEE ... |

| Code review for account opening | Code review for account opening details |

Burn Down Chart

- A burn down chart is a **graphical representation** of **work left to do** versus **time**.
- The outstanding work (or **backlog**) is often on the **vertical axis**, with **time** along the **horizontal**.
- It is useful for **predicting when all of the work will be completed**.
- There is an **Ideal tread and Remaining Work representation**

BURNDOWN FOR: QUARTZ.4.12.35.51.ITERATION 0

References

1. https://msdn.microsoft.com/en-us/library/ms181280(v=vs.90).aspx
2. https://msdn.microsoft.com/en-us/vstudio/ff637362.aspx
3. http://www.slideshare.net/rmaclean/an-introduction-to-tfs
4. http://www.slideshare.net/dvoituron/introduction-to-team-foundation-server-tfs-online?related=1
5. https://msdn.microsoft.com/library/ms181715.aspx
6. https://msdn.microsoft.com/library/fda2bad5
7. https://msdn.microsoft.com/en-us/library/ms181425.aspx
8. https://msdn.microsoft.com/en-us/library/gg475908(v=vs.100).aspx
9. https://msdn.microsoft.com/en-us/library/bb668955.aspx