Diagram

Description automatically generated with medium confidence**Week 1 Notes**

**Agile**  - time boxed approach to software delivery that builds software incrementally from the start of the initiative instead of trying to deliver it all at once near the end

*A way of working grounded in the culture of learning*

Diagram

Description automatically generated**Fixed vs Growth Mindset** – Fixed – things are the way they are and cannot change, you are born with your capabilities already determined,

Diagram, bubble chart

Description automatically generatedGrowth (Agile)– believe situations and capabilities can change if work and dedication are applied, does not fear failure, embraces change

Diagram

Description automatically generated

Being Agile – *Make People Awesome* support and empower employees in order to accomplish the mission, foster successful employees

*Safety* makes safety a priority, protects peoples time money information and relationships, believes safety is key to unlocking high performance

*Experiment and Learn Rapidly* learn rapidly by experimenting frequently, safe to fail “controlled” experiments so failure is not feared, speed is key with this, don’t wait too long to realize that something isn’t working, experiment and learning rapidly will help with achieving continuous improvement,

*Deliver Value Continuously* focus on delivering value continuously, delivering value even if you don’t have the complete feature ready, does not mean releasing a product of feature to the general public, focus on delivering a half baked idea to someone to quickly receive feedback

Graphical user interface, application

Description automatically generated**Day 2**

**(organizations dictate which process to use, some allow individual teams to decide, usually after a while though the company will narrow it down to a single process)**

*Kanban* – companies are usually to do list oriented, formally used waterfall, backlog could be infinite, you as a user pick the top on the to do list, work in progress (WIP) is limited, backlog focused, backlog is not segregated, to initiate change the ticket is moved up priority in the backlog, works well in physical production settings such as producing hardware

*Scrum* – companies committed to agile process, works off events called sprints that last 1-4 weeks but typically 2, WIP is limited,

*Scrumban* – same workflow as scrum oriented on continuous addition to the sprint, still is planned out like scrum but its more flexible on its backlogs

**Change**

Shu-Ha-Ri – originally a Japanese martial arts concept geared towards mastery of a skill

*Shu* – beginners follow the rules until they understand why they are in place

*Ha* – mid level, has experience that you can think back on to start understanding where its ok to break rules in order to be more successful

*Ri* – “Master” of the process, instead of breaking rules, you are rewriting and redefining what the rules are in order to better fit what you are doing (rules means the practices and methods you are utilizing to accomplish goals)

After rules have been rewritten, you start over at Shu

**Tools and techniques to create a common shared understanding within a team or project**

*Agile ceremonies*– daily standups sprint planning product planning etc – routine meetings within a sprint, opportunities to communicate and share ideas within the team and stakeholders

*Brown Bag Lunch* – “lunch and learn” meetings over lunch, talk about new tech, upcoming projects, opportunities to share knowledge, can be used to communicate with a separate team

*Slack* – messaging service used to communicate in groups or individuals, can separate teams by catagories

*Jira / Confluence* – ticketing service where backlogs and tasks are managed and broken down, used as documentation and management tool;

*Documentation* – allow people to move forward without direct access to someone who communicates ideas, also allows for easier onboarding

Graphical user interface, application

Description automatically generated*Virtual Team Meetings* – allow for personal meetings individually or a team without the constraints of geological location

Diagram

Description automatically generated with low confidence

Tacit – gained from experience, considered practical knowledge, not written down shared verbally and showing

DAY 3

**Work in Progress WIP**

How many jobs or tasks are currently assigned, can be limited at steps prior to a bottleneck to smooth work and increase flow and productivity, if limit is to low there is too much down time wasting manpower, if too high tasks can become idle people are overworked things can get overlooked and rushed

**Timeline

Description automatically generatedUser Feedback**

**Relative Estimation VS Absolute Estimation**

https://www.cybermedian.com/vn/agile-estimation-relative-estimates-vs-absolute-estimates/

*Relative* - Agile uses story points as an estimation, does not go off time, goes off of actions

*Absolute* – based off time

**Communicating Status of Sprint (rewatch at the last 5 min of class on 4/19/2023)**

Shift in Roles: Self Managed VS Management Driven

*Traditional* – hierarchy based

*Agile Teams* – communal and self organized, leader doesn’t necessarily hold power over fellow team members, act more as a guide

Incremental VS Iterative

*Incremental* – delivers piece by piece with the working product being the last step, also creates

*Iterative* – deliver the base product then build upon it after release, build off lessons learned during previous version, gradual manufacturing processes

<https://www.indeed.com/career-advice/career-development/iterative-vs-incremental>

**Table

Description automatically generatedPlan Driven VS Feedback Based Empirical Method**

Day 5

**Git/GitHub**

*Git* – “Global Information Tracker” – stores codebases and smaller data sets limit is 100 mb, provides a mean to back up the code. Also allows for easy sharing of code, works best with text files, allows you to look back in time to different iterations, supports branching, there is no autosave you have to make commits,

Basic Git commands – start with git

Text

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Text

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CLI – Command Line Interface – users type commands using the keyboard to tell the computer to take an action. Also graphical user interface, console, command line, terminal, shell.

**pwd** – print working directory

**cd** – change directory

* **cd ~** - move to home directory
* **cd ..** – move up one directory
* **cd foldername** – move down into
* **cd** - -- takes you back to the previous step

**ls** – list files in current directory

**ls -a** – list all files including hidden files

**mkdir forldername** – make new directory

**touch filename** – create new file

branches – us git branch command, its called cutting a branch, you start with the main branch

git checkout -b (name of new branch)