



# 22G MENTOR-MENTEE

TRAINING PLAN (NOV 2015 – OCT 2017)

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RENESAS ELECTRONICS CORPORATION

# AGENDA

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- Training target **Page 03**
- Current status **Page 05**
- Analysis gap **Page 07**
- Training plan **Page 10**



# TRAINING TARGET (1/2)

## 22G MENTOR – MENTEE TRAINING PLAN

- Training target (1/2)
- Current status
- Analysis gap
- Training plan

Achieve **“Software Design Engineer”** with role **level 2** by **July, 2017**

→ Do IDE Design Task without support, if it is within certain degree of difficult.

| Role                         | Skill                      | Description   | Target Level |
|------------------------------|----------------------------|---|--------------|
| Engineer for software design | Software Functional Design | - Decide the structure of software according to given software requirement definitions.   | 2            |
|                              | Software Detailed Design   | - Conduct a detailed software design according to given software structure definitions.   | 2            |
| Coding engineer (Software)   | Software Coding            | - Have sufficient knowledge of programming language and create a program based on the detail design document.<br>- Conduct a code review of created code. | 2            |
|                              | Readability                | - Have knowledge of techniques for improving the source code readability and perform coding accordingly.  | 2            |



# TRAINING TARGET (2/2)

## 22G MENTOR – MENTEE TRAINING PLAN

- Training target (2/2)
- Current status
- Analysis gap
- Training plan

Achieve **“Software Design Engineer”** with role **level 2** by **July, 2017**

→ Do IDE Design Task without support, if it is within certain degree of difficult.

| Skill               | Target  |
|---------------------|---|
| MCU Architecture    | - Can understand architecture of target MCU of assigned tasks.  |
| Development Process | - Know and can follow Development process.<br>- Can evaluate the results to find and improve weak phase of the process.   |
| Communication skill | - Can express ideal to others.<br>- Can report status/issues/solutions to teammates.  |
| Management Ability  | - Can schedule works and follow the schedule.<br>- Can manage common risk for assigned tasks: private issues (health,...), technical issues (lack of experience in assigned fields),... |
| English             | - TOEIC 750   |



# CURRENT STATUS (1/2)

## 22G MENTOR – MENTEE TRAINING PLAN

- Training target
- **Current status (1/2)**
- Analysis gap
- Training plan

| Role                         | Skill                      | Current status  | Current Level |
|------------------------------|----------------------------|---|---------------|
| Engineer for software design | Software Functional Design | - <b>Not familiar</b> with Functional Design.<br>- <b>Can not analyze</b> requirement specification to create Functional Design document. | 1             |
|                              | Software Detailed Design   | - <b>Can not analyze</b> Functional Design document to create Detailed Design document.   | 1             |
| Coding engineer (Software)   | Software Coding            | - Can implement source code for simple functions, but not familiar with coding by <b>following design documents</b> .                     | 1             |
|                              | Readability                | - <b>Not follow coding rule</b> : source code <b>can not be read and reused</b> easily.   | 1             |



# CURRENT STATUS (2/2)

## 22G MENTOR – MENTEE TRAINING PLAN

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- Training target
- **Current status (2/2)**
- Analysis gap
- Training plan

| Common Skills       | Current status  |
|---------------------|---|
| MCU Architecture    | - <b>Not familiar</b> with target MCU of assigned tasks.  |
| Development Process | - Not have knowledge about Development process.<br>- <b>Can not evaluate</b> the results to find weak points.                           |
| Communication skill | - Can <b>report</b> status/issues/solutions to teammates, but <b>not clear</b> (lack of information, sentences can make misunderstand). |
| Management Ability  | - Can schedule works and follow the schedule.<br>- Can <b>not manage risk</b> .   |
| English             | - TOEIC 660   |

**In current status, I lack of knowledge to adapt requirements of professional work.**



# ANALYSIS GAP (1/3)

## 22G MENTOR – MENTEE TRAINING PLAN

- Training target
- Current status
- **Analysis gap (1/3)**
- Training plan

| Skill                      | Requirement (Level 2)   | Gap   | Root Causes  |
|----------------------------|---|---|--|
| Software Functional Design | - Finish Functional Design without support.   | - Can not analyze requirement to create Functional Design document without support.   | - <b>Lack of experience</b> in Functional design.  |
|                            | - Output can be referred in Detailed Design and Integration Test phase.<br>- Output must follow document rules. | - Output is not clear to be referred in next phases (bad expression).   | - <b>Lack of experience</b> in Functional design.<br>- <b>English writing skill</b> is not good.   |
| Software Detailed Design   | - Finish Detailed Design without support.<br>- Could analyze and propose solutions to implement methods.        | - Can not evaluate the accuracy and effectively of solution for complicated functions.<br>- Can not arrange the work flow of functions. | - <b>Lack of experience</b> in Detailed design.<br>- <b>Not understand</b> related available <b>interfaces</b> and work flow of target object. |
|                            | - Output can be referred in coding and U.T.<br>- Output must follow document rules.                             | - Output is not clear enough to be referred in next phases.   | - <b>Lack of experience</b> in Detailed design.<br>- <b>English writing skill</b> is not good.   |



# ANALYSIS GAP (2/3)

## 22G MENTOR – MENTEE TRAINING PLAN

- Training target
- Current status
- **Analysis gap (2/3)**
- Training plan

| Skill           | Requirement (Level 2)                                       | Gap   | Root Causes  |
|-----------------|---|---|--|
| Software Coding | - Finish coding base on Detailed Design without support.    | - Not familiar with coding by following documents.      | - <b>Not familiar</b> with coding by following document. |
| Readability     | - Output source code could be reused for later development. | - Output source code is not easy to reused and develop. | - Not care about <b>coding rules</b> .                   |





# ANALYSIS GAP (3/3)

## 22G MENTOR – MENTEE TRAINING PLAN

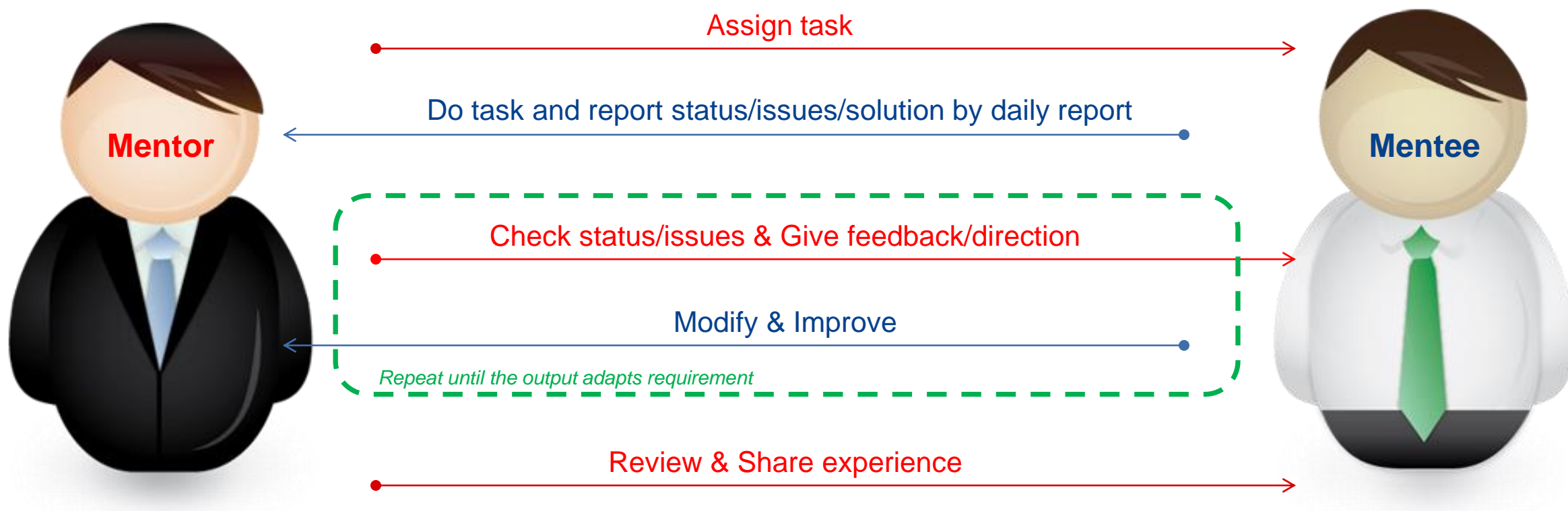
- Training target
- Current status
- **Analysis gap (3/3)**
- Training plan

| Common Skills       | Target  | Gap  | Root causes                                |
|---------------------|---|--|--|
| MCU Architecture    | - Can understand architecture of target MCU of assigned tasks.  | - <b>Not familiar</b> with target MCU of assigned tasks.   | - Lack of experience                       |
| Development Process | - Know and can follow Development process.<br>- Can evaluate the results to find and improve weak phase of the process. | - <b>Not know</b> about Development process.<br>- <b>Can not evaluate</b> the results to find and improve weak points. | - Lack of experience                       |
| Communication skill | - Can express ideal to others.<br>- Can report status/issues/solutions to teammates.                                    | - The <b>information is not enough</b> and make <b>misunderstanding</b> .  | - Lack of experience                       |
| Management Ability  | - Can schedule works and follow the schedule.<br>- Can manage common risk for assigned tasks                            | - <b>Can not manage</b> risk for tasks   | - Lack of experience                       |
| English             | - TOEIC 750   | - TOEIC 660  | - Not spend time to improve English skill. |

# TRAINING PLAN (1/7)

## 22G MENTOR – MENTEE TRAINING PLAN

- Training target
- Current status
- Analysis gap
- **Training plan (1/7)**



# **TRAINING PLAN (2/7)** **22G MENTOR – MENTEE TRAINING PLAN**

- Training target
- Current status
- Analysis gap
- **Training plan (2/7)**

| Skill                      | Gap   | Action Item   |  | Milestone | Output         |
|----------------------------|---|---|--|-----------|----------------|
|                            |   | Mentee  | Mentor   |           |                |
| Software Functional Design | - Can not analyze requirement to create Functional Design document without support. | <ul style="list-style-type: none"> <li>- <b>Investigate</b> existing requirement and F.D document.</li> <li>- Do <b>F.D for current tasks</b> (I/O Header, Python Console) from simple to complex.</li> <li>- <b>Propose</b> idea to solve issues with Mentor and find suitable solution base on feedback.</li> </ul> | <ul style="list-style-type: none"> <li>- Provide input documents, confirm understanding of Mentee.</li> <li>- Follow progress, give feedback/direction.</li> </ul> | Jul 2017  | Function Spec. |
|                            | - Output is not clear enough to be referred in next phases.                         | <ul style="list-style-type: none"> <li>- Describe <b>clearly relationship</b> between functions and <b>error cases</b>.</li> <li>- Describe <b>clearly limitation</b> and <b>usage notes</b> of functions.</li> </ul>   |  |           |                |

# **TRAINING PLAN (3/7)** **22G MENTOR – MENTEE TRAINING PLAN**

- Training target
- Current status
- Analysis gap
- **Training plan (3/7)**

| Skill                    | Gap   | Action Item  |  | Milestone | Output         |
|--------------------------|---|--|--|-----------|----------------|
|                          |   | Mentee   | Mentor   |           |                |
| Software Detailed Design | <ul style="list-style-type: none"> <li>- Can not evaluate the accuracy and effectively of solution for complicated functions.</li> <li>- Can not arrange the work flow of functions.</li> </ul> | <ul style="list-style-type: none"> <li>- Do <b>D.D for current tasks</b> (I/O Header, Python Console) from simple to complex to gain experience.</li> <li>- <b>Investigate</b> related <b>interfaces</b> and work flow of target object.</li> <li>- <b>Propose solution for problems</b> and improve them base on feedback.</li> </ul> | <ul style="list-style-type: none"> <li>- Provide input documents, development guideline, investigation tips.</li> <li>- Share design tips, techniques.</li> <li>- Follow progress, give feedback &amp; direction.</li> </ul> | Jul 2017  | Detailed Spec. |
|                          | <ul style="list-style-type: none"> <li>- Output is not clear enough to be referred in next phases.</li> </ul>   | <ul style="list-style-type: none"> <li>- Describe <b>clearly usage</b> and <b>work flow</b> of functions.</li> <li>- Describe <b>clearly some notice</b> for implementation.</li> </ul>  |  |           |                |

# **TRAINING PLAN (4/7)** **22G MENTOR – MENTEE TRAINING PLAN**

- Training target
- Current status
- Analysis gap
- **Training plan (4/7)**

| Skill           | Gap   | Action Item   |   | Milestone | Output      |
|-----------------|---|---|---|-----------|-------------|
|                 |   | Mentee  | Mentor  |           |             |
| Software Coding | - Not familiar with coding by following documents.  | - Do <b>coding</b> for CS+ components (Python console, I/O Header tool) by <b>following Design document</b> from simple to complex tasks.   | - Provide prototype, sample implementation, coding style & coding rules guideline.<br>- Follow progress, give feedback & direction. | Jan 2017  | Source code |
| Readability     | - Output source code is not easy to reused and develop.<br>- Coding without following coding rules. | - Investigate coding rule <b>document</b> to <b>learn and apply rules</b> which is related to current task.<br>- Using some <b>tools</b> which can <b>check coding rule</b> to check the source code. |   |           |             |



# TRAINING PLAN (5/7)

## 22G MENTOR – MENTEE TRAINING PLAN

- Training target
- Current status
- Analysis gap
- **Training plan (5/7)**

| Skill               | Target   | Action Item  |   | Milestone | Output           |
|---------------------|--|--|---|-----------|------------------|
|                     |  | Mentee   | Mentor  |           |                  |
| MCU Architecture    | <ul style="list-style-type: none"><li>- Can understand architecture of target MCU of assigned tasks.</li></ul>   | <ul style="list-style-type: none"><li>- Investigate <b>architecture of RL78 and RH850</b> for current tasks.</li><li>- Create <b>summary document</b> and show to Mentor.</li></ul>                            | <ul style="list-style-type: none"><li>- Give direction, tips and document source.</li><li>- Check output and give feedback.</li></ul> | Jul 2017  | Summary document |
| Development Process | <ul style="list-style-type: none"><li>- Know and can follow Development Process.</li><li>- Can evaluate the results to find and improve weak phase of the process.</li></ul> | <ul style="list-style-type: none"><li>- <b>Investigate</b> Development process to understand its role and follow it.</li><li>- <b>Report difficulties and solution</b> while following Dev. Process.</li></ul> |   |           | Plan to improve  |



# TRAINING PLAN (6/7)

## 22G MENTOR – MENTEE TRAINING PLAN

- Training target
- Current status
- Analysis gap
- **Training plan (6/7)**

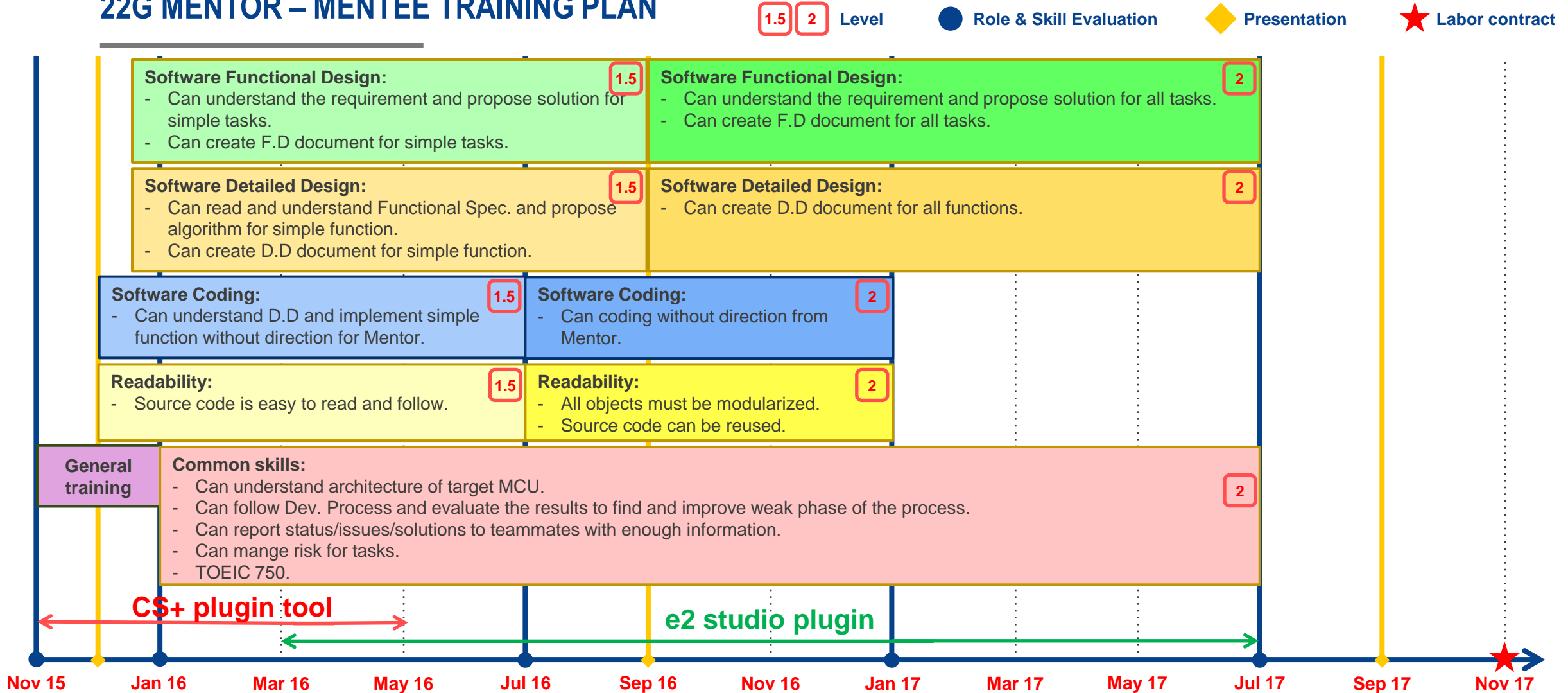
| Skill                   | Target  | Action Item   |  | Milestone | Output |
|-------------------------|---|---|--|-----------|--------|
|                         |   | Mentee  | Mentor   |           |        |
| Communicati<br>on skill | <ul style="list-style-type: none"><li>- Can express ideal to others.</li><li>- Can report status/issues/solutions to teammates.</li></ul> | <ul style="list-style-type: none"><li>- Describe from <b>basic to complex</b> information, <b>step by step</b>. <b>Confirm understanding</b> before give more information.</li><li>- Follow <b>report template</b> and <b>include background</b> to make it's easier to understand for other.</li></ul> | <ul style="list-style-type: none"><li>- Share tips and experience.</li></ul> | Jul 2017  | N/A    |
| Management<br>Ability   | <ul style="list-style-type: none"><li>- Can manage common risk for assigned tasks</li></ul>   | <ul style="list-style-type: none"><li>- Make <b>list of risk</b>, find <b>solution</b> if risk occurs.</li><li>- Show list to Mentor and modify from feedback.</li></ul>  |  |           |        |
| English                 | <ul style="list-style-type: none"><li>- TOEIC 750</li></ul>   | <ul style="list-style-type: none"><li>- Focus on <b>vocabulary</b> and review <b>grammar</b>.</li></ul>   |  |           |        |



# TRAINING PLAN (7/7)

## 22G MENTOR – MENTEE TRAINING PLAN

- Training target
- Current status
- Analysis gap
- **Training plan (7/7)**





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**THANK YOU FOR YOUR ATTENTION!**