# LC-2200 Eclipse Plug-in
# Development Setup Instructions

## Installing Eclipse
1. Open a web browser
2. Navigate to the following URL and select a mirror to download the 64 bit version of "Eclipse IDE for Java Developers"
    - [https://eclipse.org/downloads/](https://eclipse.org/downloads/)
3. Navigate to the downloaded archive file and move it to your home directory.
4. Extract the archive file in your home directory
5. Go into the eclipse folder that was extracted
6. Move your extracted JDK folder (ex: jdk1.8.0_91) to the eclipse directory (Only if java is not already installed and in PATH variable)
7. Rename the JDK folder from (jdk1.8.0_91) to "jre"
8. Run Eclipse and choose your default workspace

## Configuring Eclipse – Installing Xtext SDK
1. Open Eclipse
2. Go to the help menu
3. Click "Install New Software"
4. Copy the following URL into the "Work with:" field
    - http://download.eclipse.org/modeling/tmf/xtext/updates/composite/releases/
5. Select the "Xtext SDK" package
6. Install the Xtext SDK package

## Configuring Eclipse – Importing Projects
1. Open Eclipse
2. Go to the file menu
3. Click "Import"
4. Click "Browse" and select the "org.team38.assembly.parent" projects
5. Make sure "Search for nested projects" is checked
6. Uncheck org.team38.assembly.parent from the "Projects:" window
7. Six projects should be checked:
    - org.team38.assembly
    - org.team38.assembly.feature
    - org.team38.assembly.ide
    - org.team38.assembly.tests
    - org.team38.assembly.ui
    - org.team38.assembly.ui.tests
8. Click Finish

## Working with Xtext – Grammar file
1. Changes to the LC-2200 grammar should be made to the following file
    - org.team38.assembly/src/org.team38.assembly/LC2200.xtext
2. After changes are made to the file, right click inside of the grammar file and select "Run as", and then "Generate Xtext Artifacts."
3. Note that regenerating artifacts may cause errors in classes that rely on generated classes (eg: code generation)

## Working with Xtext – Feature Location

1. Features that interact with the grammar can be found in the following locations:
    - Code Generation
        - org.team38.assembly/src/org.team38.assembly.generator
    - Eclipse Perspectives

- org.team38.assembly/src/org.team38.assembly.perspectives
  - Semantic Validation Checks
    - org.team38.assembly/src/org.team38.assembly.validation
  - Wizards
    - org.team38.assembly/src/org.team38.assembly.wizards
  - Syntax highlighting
    - org.team38.assembly.ui/src/org.team38.assembly.ui
  - Outline View
    - org.team38.assembly/src/org.team38.assembly.outline
  - Content Assist
    - org.team38.assembly/src/org.team38.assembly.contentassist

**Testing the plug-in**
1. Right click org.team38.assembly in the project explorer
2. Select "Run as"
3. Choose "Eclipse Application"