**Part 1. Coding exercise**

**1-35 minutes**

1. Clone the project   
   <https://rgpinterviews@bitbucket.org/rgpinterviews/rgp-temperature-assignment.git>
2. Implement a new feature to get the median value for a list of given temperatures.

Note: Appropriate unit tests should be included.

**Part 2. Draw system architecture exercise**

**36-45 minutes**

1. Draw a system architecture for a payment system, including microservices and any other components that you consider appropriate.

**Part 3. Draw sequence diagram**

**46-60 minutes**

For the system you designed in part 2 above

1. Draw a sequence diagram for a payment request. Assume no failures.
2. Draw a sequence diagram for a payment request. Assume a failure occurs in one of the components, how should this be handled?