The work deals with software projects estimation. The first part presents selected methods for estimating and associated problems. Next there is an analysis of the estimation and the choice of methods suitable for use in the Komerční banka. In the second part of the work, there is proposed a methodology for estimating the size of software projects and the work needed for their completion. This methodology is not intended only for the software development in the Komerční banka, with whose cooperation the work was created, but it is with minor changes sufficiently universal and applicable in other companies. Part of this work is also a simple tool designed to support the estimation using the methods of the proposed methodology.